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ABSTRACT

The document provides a collection of teacher-developed classroom materials for use in seventh, eighth, and ninth grade career development programs. Four packets are offered, presenting classroom materials for English, mathematics, science, and social studies. Each packet includes classroom materials organized according to grade level presenting: an overview, suggested skill objectives, techniques, specific career clusters and objectives, concepts, materials needed, possible activities, classroom questions, and supplementary classroom materials. A bibliography for teachers' use in integrating career development and subject content concludes the document. (MW)

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CAREER DEVELOPMENT 7-8-9

MATHEMATICS

SOCIAL

ENGLISH

SCIENCE

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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CE003158

ED103587

CAREER DEVELOPMENT

Robbinsdale Area Schools
Independent School District 281
August, 1971

Developed by the Hosterman Junior
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District 281, Robbinsdale Area Schools

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THE AUTHORS HAVE ATTEMPTED TO SHOW THROUGH THE CLASSROOM ACTIVITIES THAT CAREER EXPLORATION, INSTEAD OF BEING A DIFFICULT AND CLUMSY ADDITION TO THE TEACHING PROCESS, ACTUALLY BECOMES AN EFFICIENT, AFFECTIVE VEHICLE FOR ALL TYPES OF LEARNING.

HOSTERMAN CAREER DEVELOPMENT COMMITTEE

CAREER DEVELOPMENT IN PUBLIC EDUCATION--A NEED NOT YET FULFILLED

A-T-T-E-N-T-I-O-N !

LAYOFFS INCREASING

WORKERS MUST LEARN TO RETRAIN

VETERANS CAN'T FIND WORK

STRIKE SLOWS NATION

TO GET A GOOD JOB, STAY IN SCHOOL

WELFARE PAYMENTS INCREASING

ENGINEERS OUT OF WORK

DEGREE HOLDERS NO LONGER IN DEMAND

In recent years, quotes such as these have been almost impossible to avoid; they are being heard on television, radio, and on the streets. Written material revolving around an occupational topic is increasing at a geometric rate, yet with all of this publicity, the career casualty list is increasing.

Career casualties are not born, however, but are a product of a rapidly changing technological society. The experiences of life in and out of the classroom have helped few to master a skill which is saleable in the marketplace of industry. Educators need only look at the graveyard of the unemployed to discover that a large portion of the unproductive labor force has just been released from our educational systems. It is this group and its forthcoming members that need to be helped.

True problem solutions can occur only if the early causal events are rectified. The potential to implement meaningful career development programs does lie within the realm of public education. The career clamorings listed above are seldom heard, discussed, or explained within the structure of today's schools. This is not to say that the school program is not changing, for there has been a noticeable revolution in curriculum development and classroom techniques. The obvious exception, however, has been in the area of career development.

We have long passed the time when career exploration and experiences can be left to a segment of the ninth grade social studies program. It is imperative that a curriculum revision occur and it must recognize that the world of work is not static, but is increasingly fluid. Curriculum experiences provided need to be inter-disciplinary or, better still, non-disciplinary in nature.

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CAREER DEVELOPMENT IN PUBLIC EDUCATION--A NEED NOT YET FULFILLED

The student must be allowed to discover through interesting and meaningful (to him) activities that planning for career choices and maintenance is an on-going process. It is made easier by recognition of employment trends, understanding academic and psychological abilities necessary for employment, and utilizing the professional help that exists within the school and the community.

Career development is essentially a process of relating self to occupations. In the exploration and discovery stages, the student should consider broad occupational areas. Part of this process means discovering occupations in which one utilizes his abilities and experiences the consequences of achievement, perhaps through simulation games or on-the-job training.

Usually, the student, with supportive and explorative guidance, does a reasonably good job of developing self-confidence in relation to selecting those experiences which appear to be in keeping with his interests and aptitudes. Frequently, however, adults create frustrating situations by attempting to drive instead of guide learning activities. The best learning situation leading to proper career selection and preparation is an occupational environment incorporating assistance from those who can help the student clarify his abilities, interests, and aptitudes.

The role of the teacher becomes very important if these experiences are to take place in a classroom setting. Being a facilitator in a strongly student-centered learning approach is necessary if the student is to realize where his abilities and weaknesses lie in all aspects of life.

The units developed in these packets will provide, for teachers, specific career clusters related to course content, skill objectives, examples of process for involving students in career development experiences, and a bibliography for teachers' use in integrating career development and subject content.

THE AUTHORS HAVE ATTEMPTED TO SHOW THROUGH THE CLASSROOM ACTIVITIES THAT CAREER EXPLORATION, INSTEAD OF BEING A DIFFICULT AND CLUMSY ADDITION TO THE TEACHING PROCESS, ACTUALLY BECOMES AN EFFICIENT, AFFECTIVE VEHICLE FOR ALL TYPES OF LEARNING.

EVALUATION SHEET

Teachers are the facilitators of learning in the process of public education. Materials for the students that could contribute to meaningful classroom experiences will only do so if the teacher finds such materials useable within his/her framework of classroom activities.

These packets were developed by teachers, for teachers' use. They are intended as possible ideas to be mingled with the imagination and creativity of each teacher.

It is the intent of this committee to revise and refine these packets.

Your experiences in using the materials will be of invaluable help in doing the revision. Feel free to react to any or all of the questions.

Have you used any of the material? Yes_____ No_____

If so, which parts?

Were the activities helpful to you in relating your subject to careers? Yes_____ No_____

Did the activities inspire involvement on the part of your students? Yes_____ No_____

Has career development taken on a more meaningful position in the classroom?

Comments:

Return to: Hosterman Career Development Committee
Hosterman Junior High School
5530 Zealand Avenue North
Minneapolis, Minnesota 55428

INDIVIDUAL DISCIPLINE UNIT FORMAT

Introduction

- Skill Objectives
- Techniques

Overview

Career Objectives

Specific Concepts

Materials Needed

Possible Activities

Classroom Questions

DISCIPLINE INTRODUCTION

ENGLISH

Because comments made by local business people do indicate a weakness in the area of employee use of English mechanics, the career development models have been structured to help overcome this weakness. The total program designed for junior high English is centered on skills necessary for pursuing an avenue of employment. The student's effective self-appraisal is necessary for the development and completion of the application form in seventh grade. Emphasis in eighth grade is placed on the importance of the information given on the application and from the verbal and non-verbal responses in the personal interview. Culmination of these two projects is found in the ninth grade activities where students complete application forms for actual jobs for which they may be applying in the near future.

Suggested Skill Objectives

- Is able to gain information by listening and observing
- Clarifies his purpose or theme
- Is able to empathize with others, seeing things through their eyes, whether he accepts their viewpoint or sympathizes with them or not
- Helps create and preserve an atmosphere in which all members of a group feel secure and eager to participate
- Checks, refines, and eliminates hypotheses, working out new ones where necessary
- Acquires information through reading:
  - Reads for details which support or contradict generalizations and main ideas
  - Is able to interpret tables, graphs, and charts

Techniques

- Role playing
- Simulations
- Discussion
- Reading for information
- Films and filmstrips
- Slides
- Observations
- Community resource people

SEVENTH GRADE ENGLISH

OVERVIEW

Seventh grade English encompasses:

- Writing
  - Creative and practical
- Literary interpretation
  - Poetry and prose
- Library work
- Research papers

These are to include, in general:

- Communication skills
- Appreciation of literature
- Working knowledge of IMC
  (Instructional Media Center)

Specific teaching concepts to be emphasized in the unit presented are:

- Communication
- Mechanics of communication
- Need for communication in daily work
- Identification
- Role playing
- Humanization

SEVENTH GRADE ENGLISH

Career Objectives

Helping the student view self as a worthy person

Helping the student experience success

Helping the student appreciate his own potentials and interests

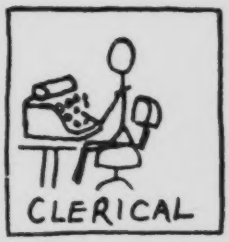
Helping the student develop a positive self-image

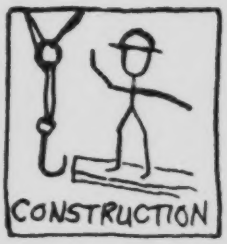
Specific Concepts

Role
Identification
Association
Interdependence
Services
Self
Socialization (values and attitudes)

Materials Needed

Display materials like those below, on tagboard using magic-marker





Dictionary

Application facsimile segments

Poster materials (magazines, newspapers, tagboard)

Possible Activities

I. Utilizing display materials (such as those under "Materials Needed"), this activity would begin with a general discussion of several occupational areas, emphasizing duties and/or responsibilities of each as well as desirable educational training or work experience.

II. After selecting an occupational area, students would develop posters illustrating some of the many possible, specific jobs within each cluster and submit them for display and discussion.

III. After making a specific job selection, students would then build an appropriate application form for the job they have selected. Using the application facsimile segments (the application form enclosure divided with dotted lines), the students would then cut and paste together an application which would include all information that in their judgment would be necessary for a prospective employer to know.

Application Facsimile Segments:

To be duplicated and divided on dotted lines and distributed to students for use in Activity III.

Name_____ Address_____

_____
City State Zip

Telephone_____

Parent_____ Address_____

_____
City State Zip

Age_____

Sex_____

Marital Status_____

Elementary School_____ Location_____ Years____
_____ _____ ____
_____ _____ ____

Secondary School_____ Location_____ Years____
_____ _____ ____
_____ _____ ____

Vocational Technical School
_____ Location_____ Years____
_____ _____ ____
_____ _____ ____

Junior College _____ Location _____ Years ____
_____ _____ ____
_____ _____ ____

Business School _____ Location _____ Years ____
_____ _____ ____
_____ _____ ____

College or University _____ Location _____ Years ____
_____ _____ ____
_____ _____ ____

Military Status _____

Work Experience _____ Years ____ Why did you leave? _____
_____ ____ _____
_____ ____ _____
_____ ____ _____

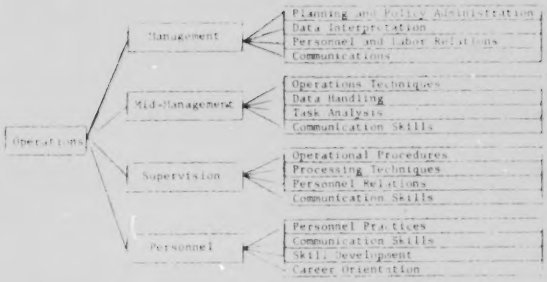
Position applied for: _____

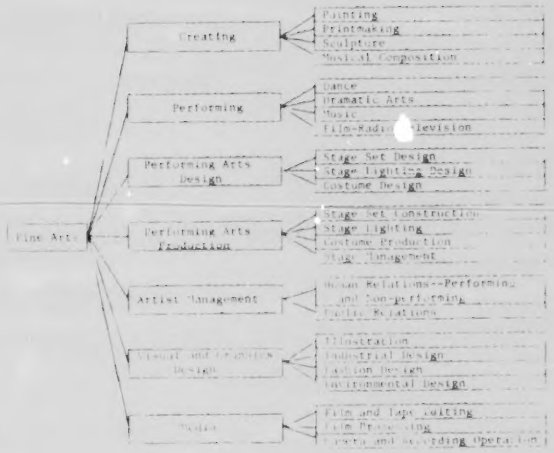
What are your qualifications for this job? _____
_____

Why are you seeking this position? _____
_____

Do you consider this employment to be temporary or permanent? _____
_____

Cluster for
FINE ARTS AND HUMANITIES





14A

EIGHTH GRADE ENGLISH

OVERVIEW

Eighth grade English encompasses:

- Writing
  - Creative and practical
- Literature
  - Short story
  - Biography
  - Novel
  - Rock poetry

These are to include, in general:

- Communication
- Social values and attitudes
- Culture

Specific teaching concepts to be emphasized in this unit are:

- Communication
- Mechanics of communication
- Need for communication in daily living
- Role playing
- Identification
- Humanization

EIGHTH GRADE ENGLISH

Career Objectives

Helping the student expand his knowledge of career-vocational information and identify career opportunities within a community

Helping the student assess the extent to which technological change may affect the employment opportunities and task requirements of a preferred occupation

Helping the student become aware of the variety of the opportunities within each job cluster

Specific Concepts

Values
Conflicts
Civil liberties
Decision-making process
Discrimination

Materials Needed

Newspaper want ads representing:
- Communities of various sizes
- Communities of varied cultural and ethnic backgrounds
- Various time periods of history (i.e., 1910, 1930, 1971)
- Current city newspaper (Minneapolis Star and Tribune)

Examples of interview questions

Copy of the book Body Language (see footnote on following page)

Possible Activities

I. Design application form from want ad. (Prior to this activity, it is recommended that the teacher go back and review the seventh grade activity dealing with job applications.)

Using the Minneapolis newspaper as an example of a large metropolitan community, survey the jobs available in terms of areas of employment open and numbers of jobs in each area. In order to show that the demand for various jobs does change, a comparison of the kinds of want ads listed will be made. (See materials listed in item three above.) After surveying the broad aspect of jobs, the students should select the job which seems to best suit their interests and talents. Before the students begin to create a job application for their selected position, the teacher should review the seventh grade English unit in which job applications were constructed by the students from application facsimile segments.

Using these resources, the students will then design a job application and complete it for the specific job which they have selected. These will be retained for use in conjunction with the last activity which will be a simulated job interview.

II. Non-verbal communication: A person gets a job or not depending upon the information given in response to the questions asked in the interview, written responses on applications, physical appearance, and behavior of the applicant. This activity will emphasize the implication of "body language."

> "Within the last few years a new and exciting science has been uncovered and explored. It is called 'body language.' Both its written form and the scientific study of it have been labeled kinesics. Body language and kinesics are based on the behavioral patterns of non-verbal communication. Clinical studies have revealed the extent to which body language can actually contradict verbal communication. Body language can include any non-reflexive or reflexive movement of a part, or all of the body, used by a person to communicate an emotional message to the outside world."[1]

Note: If there is a speech teacher or a person who has had extensive training in dramatics, this would be a good project to teach in connection with that department or to have him teach the unit.

Possible means of demonstrating "body language" could be:

A. Posture is used to refer to the non-verbal communicative way the body is held, whether in a sitting or a standing position.

Many feelings can be conveyed by the way you stand or sit; some of the things you convey could help you to get a job.

Select one other person in the class, tell only the teacher who this person is. (The teacher should be certain that everyone in the class is being observed by someone else.) Observe this person in terms of his posture while the class is busy in some other project (group discussions can work very well here). Observe the various positions this person assumes and make notes on what you thought when that person was in that certain position. Class discussion can then follow on what some of these various positions were and the meaning they conveyed. Implications for how this could help or hinder you in getting a job should then be discussed further.

B. Role-playing or pantomimes bring out the movements that denote certain feelings. Following is a list of situations that can be used:

[1] Faust, Julius, Body Language, Pocket Books, New York, N. Y., 1971

FEELINGS	ACTIVITY
Fear	A child just ahead of you steps into the path of a fast-moving automobile.
Nervousness	A pedestrian crossing the street during rush-hour traffic for the first time. (Could be used for fear also.)
Anger	An irate motorist changing a tire on a hot day and he lost one of the lug nuts.
Frustration	A mother getting dinner and setting the table while trying in vain to keep the two-year old out of mischief.
Boredom	A person sitting in an auditorium waiting for two hours for a concert to get started.

Be sure to identify those movements in each section which convey these feelings. Again, implications of these movements during an interview shoul be discussed.

C. Have the students observe other students and teachers in a large study hall or resource room and have them list the moods and feeling that were conveyed by certain ways of sitting. In class have the students get into groups of three or four and work up demonstrations on how feelings and moods are conveyed by the way people sit. (Students can be very creative and observant with this; allow them to come up with the ideas.) Following the demonstrations, students can be asked if they were able to see themselves in relationship to what happened in class and how it affected them to see themselves as others see them.

III. In order to utilize all of the information from the first two activities, job application and the implications of body language, the culminating activity will be the job interview. To effectively structure the job interview activity, aids for the teacher on the techniques of interview are listed.

A. Basic Rules for Interviewing

1. The interview is a special kind of conversation in which the purpose is either to gather or to supply information.
2. The man who is prepared has his battle half fought.
3. When interviewing, prepare questions beforehand.
4. Make your best appearance.
5. Before every interview with some businessman or executive, stand in front of a long mirror. Imagine you are that executive looking at you for the first time. Don't leave the house until you are sure every inch of your appearance would give the kind of impression that executive would like to see, and you would like to give.
6. The first impression is a lasting one, so make yours a good one.
7. Remember the interview begins the second you make your appearance.
8. Keep the interview moving.
9. Don't monopolize the interview.
10. Treat the person you are interviewing with respect.

11. Closing an interview may be the hardest part. Some people don't wind up; they just run down. When the subject has been adequately covered, summarize and leave.

B. Specific Information for Job Interviews

1. Learn about the job.
2. Be able to give the personnel manager a concise picture of your abilities and interests.
3. Select the facts about yourself that you should emphasize in the interview.
4. Make a favorable impression - remember Confucius said: "When you know a thing, to hold that you know it; and when you do not know a thing, to allow that you do not know it; this is knowledge."
5. Clothes are more important than you may think. Shakespeare: "For the apparel oft proclaims the man...."
6. Your behavior reveals things about you that your words cannot. You would not say, "I am casual and good natured. I am easy to get along with and very courteous. Whatever I do, I am enthusiastic about." To say this would sound conceited. But you can get these qualities across to the employer by your behavior.
7. Your speech is the essence of the interview. "As a vessel is known by the sound, whether it is cracked or not, so men are proved by their speeches, whether they be wise or foolish." Demosthenes
8. You are also entitled to ask some questions, the intelligence you reveal may very well get you the job.
9. End the interview on a positive note. "The tongue is but three inches long, yet it can kill a man six feet high." Japanese Proverb

Ideas for interview questions (to be given to students, to suggest other ideas for questions from them.)

What things did you do during the past year that would be of interest to other people?
What activities outside of school are you interested in and why?
Have you ever had a job? If so, what were your responsibilities?
When you don't have any work to do and you can do anything you want to, what do you choose to do and why?
When you can choose the television shows you want to watch, what shows do you choose and why?
Do you enjoy going for a walk or shopping by yourself or with a friend?
What do you think the purpose of school is?

After work has been done with how to conduct interviews, the following steps should be followed to set up the job interviews in the class:

Review the job applications the students completed in Activity I. Following this, make name tags for personnel directors that will correspond to the jobs being applied for.

Divide the class in half; one group will be the personnel directors and the others will be the ones looking for jobs. Continue the experience

by switching positions.

Students who are the personnel directors should take their places at desks arranged to simulate an office atmosphere; the other students will then bring their job applications to the appropriate personnel director. When this set of interviews is completed, the students will reverse positions.

After all of the interviews are done, class discussion can proceed along the lines of the following questions:

1. What did you learn from what the interviewee did?
2. What did you learn from what the interviewee said?
3. Was there any difference between the information that you obtained?
4. On what information would you base your decision to hire or not hire the individual?

Positive, constructive discussions should follow the interviews to assist students in improving their manner of selling themselves to an employer.

ST. PAUL PIONEER PRESS
April 5, 1894

HELP WANTED - MALE

WANTED AT ONCE - A GOOD SCANDINAVIAN drug clerk, must be registered in Minnesota. Address: F.L.N. Pioneer Press

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STRONG BOY TO LEARN STEREOTYPING. Apply to Northwestern Newspaper Union, 1107 Pioneer Press Bldg.

HELP WANTED TO MAKE THE MERITS of Maltese Whisky known to those in need of a tonic or suffering with grippe. Apply to your druggist.

WANTED - A COMPETENT TRAVELING SALESman, headquarters at Mpls. to canvass the trade of the two cities and vicinity. One acquainted with the stove trade preferred. Address: Bx. Care Nicollet Hotel, Mpls.

WANTED - AN EXPERIENCED CIGAR SALESman for old established house; country trade. K 36, Pioneer Press

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HELP WANTED - FEMALE

WANTED GIRL FOR GENERAL HOUSEWORK, must come well recommended. 727 Marshall Ave.

WANTED - A FIRST CLASS COOK References required. 192 Summit

WANTED - A HEALTHY WET NURSE - 357 Marie Ave. St. Paul

WANTED - YOUNG GIRL 14 to 15 years old to take care of a baby. Inquire 727 Ashland

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MINNEAPOLIS TRIBUNE
December 7, 1897

HELP WANTED - MALE

ABLE CHRISTIAN MEN OF GOOD ADDRESS to extend the new home culture work; permanent, high grade employment; only strong, reliable men need apply. 406 Delaware St. S. E.

A FEW GOOD HUSTLERS - 36 CENTRAL AVE.

WANTED FOR U.S. ARMY - Able-bodied, unmarried men, between ages of 21-30, citizens of the United States, of good character and temporate habits, who can speak, read and write English. For information apply, preferrably by letter, to Recruiting Officer, Fort Snelling, Minnesota

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WANTED - EXPERIENCED MALE STENOGRAPHER and type writer; must master Scandinavian and English; good moral character. Apply, with references, K 95, Tribune

---

HELP WANTED - FEMALE

COMPETENT CHILD'S NURSE OR MAID. Irish or German preferred, two children in family, four and eight years. Reply to Mrs. Samuel Hill, 1910 Stevens Ave. Minneapolis

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LADY WHO UNDERSTANDS ELECTROLYSIS - can secure steady employment. Address at once giving references and experiences. X 54, Tribune

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AN EDUCATED young lady of good address; must be an experienced canvasser. Can procure good position.

GIRL FOR HOUSEWORK - WASHING SENT OUT; no furnace to tend; central location 105 Spruce Place, near Grant St.

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MINNEAPOLIS SUNDAY TRIBUNE
August 1, 1920

HELP WANTED - MALE

STENOGRAPHERS - Three openings in Minnesota. Young men to learn milling business. Light dictation, $1,000 to $1,500

BKPR. - Minn. Familiar with Real Estate paper. $1,500

MGR. ASST. BUYER - Grain elevator $1,500

WANTED - YOUNG MAN OVER 20 TO ASSIST bookkeeper in large downtown store. Must be good penman and accurate at figures. $75 to $80 to start. Address in own handwriting. Address: R 1997, Tribune

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3 SALESMEN, LIVE WIRES, TO SELL electrical appliances. An opportunity to make some real money and learn the business. Large advertising campaign starts Aug. 1. Ask for Mr. Morton. Great Western Stove Co. 312 Henn. Ave.

---

10 CARPENTERS
65 BUILDING LABORERS
1 A-1 STEAM FITTER
2 CAR WASHERS
40 COMMON LABORERS
10 WAREHOUSEMEN
2 JANITORS
2 NIGHT WATCHMEN
10 TRUCKERS
3 WOOD MACHINE OPERATORS
2 BENCH MECHANICS
6 TINNERS
4 CEMENT FINISHERS
3 TEAMSTERS
8 ELECTRICIANS

CITIZENS ALLIANCE FREE EMPLOYMENT BUREAU, 212 7th ST. S.
NO FEE CHARGED

HELP WANTED - MALE (cont.)

MAN TO DRIVE TEAM AT ONCE TO DELIVER wood and coal. Cedar Ave. Fuel Co. 630 Cedar Ave. ATlantic 1370

TEN HARVEST HANDS IN THE RED RIVER VALLEY. $5.00 per day and board. Want these men to go out tonight. Apply 111 Marquette N.W. Employment Co.

BLACKSMITH, EXPERT, who understands spring work. Best pay, steady job. Standard Spring Co. 409 S. 5th St.

BUSHELMAN: Wanted at once. Steady year round work. C. A. Ervig, 322 - 20th St.

HELP WANTED - FEMALE

SALESWOMEN WANTED FOR VARIOUS DEPARTMENTS. APPLY SUPERINTENDENT, BALCONY, L. S. DONALDSON COMPANY

Steno. - Auto Sales $100
Steno. - Publishing house $100
Steno. - Manufacturing $100
Biller - three - $75-$85
Cashier - Record work $18
Typist - Good demand
Filing - Young experienced girl $15-$17
THE BROWN BUREAU, 700 PALACE

CHAMBERMAIDS AND HALL MAID WANTED
Apply housekeeper, 8th floor, YMCA

DISHWASHER WANTED - APPLY TWIN CITY LUNCH - 315 Marquette.

22

MINNEAPOLIS SUNDAY TRIBUNE
August 5, 1934

HELP WANTED - MALE

MARRIED MAN about 30 years of age, capable of selling dairy products to regular route of retail trade in city. To wear well with the customers since most of the business is repeat orders. Salary plus bonus in accordance with proven results. Write T 15 Tribune.

FLOUR SALESMEN for retail grocery trade. Twin Cities and rural area. Liberal commission; state experience and all details. Write M 1166 Tribune.

WANTED - Used Car Salesman with car, one who can sell. No orders takers need apply. Apply in person to: Mr. Higbee, Grossman Chev. Co.

MAKE $50 WEEKLY. Buy old inner-tubes for 2¢, sell for 90¢. Complete instructions - 25¢. Seibers, Box 2734, B & L Station, Minneapolis

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EXPERIENCED MAGAZINE SALESMAN, best proposition on market Sure sales. We train you. Mr. Blake 1040 Lumber Ex. Bldg.

EXPERIENCED CHEF WITH GOOD references wanted. Good wages. 315 14th St. S. E.

MINNEAPOLIS SUNDAY TRIBUNE
December 2, 1934

(Because of economic conditions, the want-ads for this date were extremely limited. Most ads were for salesmen.)

HELP WANTED - FEMALE

HOUSEKEEPER - Take full charge. 3 in family, in city. P.O. Box 4? Mpls.

WOMAN who understands Swedish, to care for woman invalid. State age. $15 per week. Write H 023 Tribune

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ENTERTAINERS WANTED. Auditions, Big demand and agents wanted. Arthur Malmberg, 3544 32nd Ave. S.

STRONG CATHOLIC GIRL, thoroughly experienced, good with children, good pay if capable. CH 1848

WANTED - Musician for country tavern. Piano or string instruments preferred Also lady entertainer. Write T 168 Tribune

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23

MINNEAPOLIS MORNING TRIBUNE
August 1948

HELP WANTED - MEN

ASSEMBLERS - Rotating shift
DONALDSON COMPANY, INC.
655 Pelham Blvd.
St. Paul Midway District

BODY MAN - PAINTER to take over complete body shop, percentage deal. Excellent opportunity for right man. Fenton Chev. Co. Litchfield, Minn.

GRAIN SHOVELERS - Experience preferred but not necessary, unloading wheat only. Apply Robin-Hool Elevator, Hiway 7 and Salen Ave. or Phone Wh 0488, after 4 P.M., call WH 4470.

$1.15 to $1.95 per hour
Day Shift
Boeing Airplane Co.
405 Loeb Arcade - 5th & Henn.

Lathe - Men - Experienced
Du - 2984

LINOTYPE operator, experienced preferred, but will take beginner. Single preferred because of housing situation. Drinkers need not apply. County seat, 100 miles east of Twin Cities. Barron County News Shield, Barron, Wisc.

PHOTOGRAPHER. Dark-room man; thorough experience and all around portrait work essential. Steady position, good salary assured.
AGGORD STUDIO 55 S. 85th

PRESSER - Exp. Comb. wool-presser. Steady work, good wages. NO floaters. Model Launderers
19th st. and Henn. S.

HELP WANTED - WOMEN

POWER MACHINE OPRS. We have many openings for operators including:
SPECIAL MACHINE OPRS.
to sew on sportswear
MUNSINGWEAR, INC. 275 Lyndale N.

ANCHOR CASUALTY CO. University Ave. at City Limits - several good positions
Stenographic
Dictaphone
Typing
Filing
Permanent work with good future.
5 day week, many employee benefits.
Call Miss Brown - NE 4054

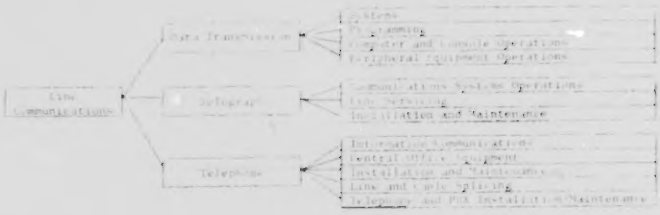
DAYTON'S
SALESWOMEN FOR
TEMPORARY
EMPLOYMENT
APPLY EMPLOYMENT OFFICE 9th FLOOR

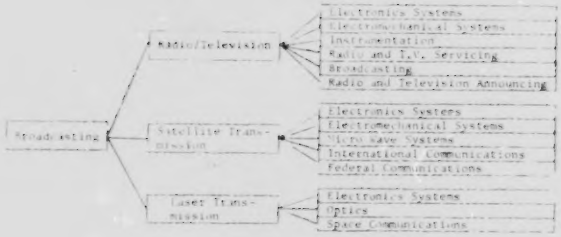
STOCK GIRL - full time. Interview Tuesday between 8 and 9 A.M. only. Amlunen, Co.

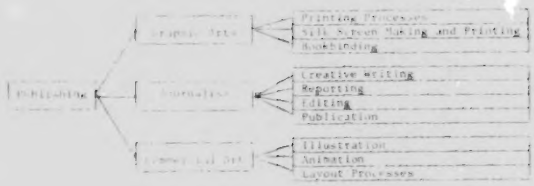
TELEPHONE OPERATOR, TYPIST
N.W. Warehouse Co.
301 N. 7th St.

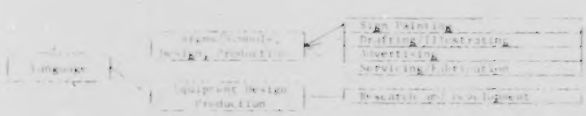
24

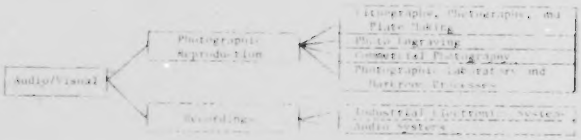
Cluster for
COMMUNICATION AND MEDIA











NINTH GRADE ENGLISH

OVERVIEW

Ninth grade English encompasses:

Composition and grammar
Literature
- Mythology
- Romance
- Biography
- Poetry
- Shakespeare

These are to include, in general:

Communication
Culture
Literary heritage

Specific teaching concepts to be emphasized in the unit presented are:

Role
Association
Interdependence
Services
Socialization
Self

Career Objectives

Helping the student explore interrelationships and interdependence between jobs

Helping the student evaluate the relevance of his own aptitudes and abilities for broad occupational areas

Helping the student examine occupations in terms of his current life context, considering such factors as personal and parental aspirations, family background, personal values, etc.

Helping the student identify the personal compromises he may have to make in order to attain a chosen occupational goal

Specific Concepts

Role
Association
Interdependence
Services
Socialization
Self
Scarcity
Resource
Distribution
Money and credit
Culture
Environment
Incentives
Competition
Institutions
Models
Status
Labor

Materials Needed

Specific job applications from various employers

Personnel representative from industry, obtained through community resource program

Sample letter of inquiry about employment to various industries

Video-tape, if available, or tape recorder

Possible Activities

I. Job Opportunity Exploration: To stimulate interest in this activity, have the students list jobs and places of employment they would be interested in. As a class project (or on an individual basis), develop a good letter of inquiry to one of the places of business already mentioned or one of particular interest in your community.

As an example, see the sample on the following page:

Sample Letter of Inquiry

July 27, 1971
5530 Zealand Avenue North
Minneapolis, Minnesota 55428

McDonald's Restaurants
8030 Nicollet Avenue
Minneapolis, Minnesota

Dear Sir:

This letter is written to inquire about the possibility of jobs for teen-agers in your industry. We are working on a career development unit in English and would like to explore the job requirements of your company. In our work we have recognized the importance of the job application and emphasis is being placed on the necessity of these being completed satisfactorily. In order to assist us in our study, we would appreciate being able to study your application for employment.

We would appreciate receiving an application form from you at your earliest convenience. We thank you in advance for your co-operation in this matter.

Sincerely yours,

Johnny Eager

After receiving replies from these companies, the students will complete one of the application blanks with special care taken to emphasize mechanics. Added incentive can be achieved by referring to Activity II.

II. Personnel Representative Interview: (Prior to this activity, the teacher will contact the community resources program and line up prospective employers to come and conduct interviews in the classroom. Also, arrangements should be made to have the interview video-taped or taped for future study, if possible. After students have completed the application blanks, a prospective employer will review the applications and select students to be interviewed. Allow time in class for the visitor to react to the interview, to discuss interviewing procedure and to answer student questions.

Methods for critiquing Activity II would be:

1. Have the students dramatize job interviews showing desirable and undesirable conduct for job applicants.

2. Re-play of video tape or tape for classroom discussion.

TARGET STORES INC.
AN EQUAL OPPORTUNITY EMPLOYER

APPLICATION FOR EMPLOYMENT

COURTESY OF TARGET STORES

Name _____ Social Security Number [ ][ ][ ][ ][ ] Date _____
LAST FIRST MIDDLE INITIAL MAIDEN NAME

Present Address _____ Phone No. ( ) _____ Do you Rent [ ] Own [ ] Other
STREET CITY STATE ZIP AC

Previous Address _____ Date of Birth _____ Sex
STREET CITY STATE ZIP MO DAY YEAR M F

Marital Status Single [ ] Married [ ] Divorced [ ] Separated [ ] Occupation of Spouse _____ Number of Dependents _____

In case of an emergency notify _____ _____ Address _____ Phone No. _____
RELATIONSHIP

How were you referred to Target Stores? _____

Have you every been employed by Target Stores Inc ? Yes [ ] No [ ] If yes, when _____ Relatives in Target Stores _____

Friends in Target Stores Inc _____ Are you a U.S. Citizen? Yes [ ] No [ ]

Have you served in the Armed Forces? Yes [ ] No [ ] If yes, type of discharge? _____ What is your Present Draft Status? _____

Have you ever been arrested? Yes [ ] No [ ] Have you ever been convicted of a crime, misdemeanor, felony? Yes [ ] No [ ]

PLACEMENT INFORMATION

Do You Desire
Part Time [ ] Full Time [ ] Hours Available _____ Days Available _____ Position Applying For _____

Related Experience _____ Interest in other work _____ Minimum Salary Required _____

Do you type? Yes [ ] No [ ] WPM _____ Take Dictation? Yes [ ] No [ ] WPM _____ Office Machines you operate _____

EDUCATION	Name of School	Circle Last Year Completed	Year Grad.
Grade School		1 2 3 4 5 6 7 8	
High School		1 2 3 4	
College		1 2 3 4 DEGREE REC'D.	
Business or Trade Schools			

If you attended a college or university state Major _____ Minor _____
GPA — Extra curricular activities _____

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MEDICAL INFORMATION

Have you ever received benefits for any injury or illness that was incurred as a result of employment? Yes [ ] No [ ] If Yes, explain. _____

Have you consulted, been examined or treated by a physician, osteopath, chropractor, etc. within the past 5 years? Yes [ ] No [ ] If Yes, explain. _____

_____ Height _____ Weight _____

PREVIOUS EMPLOYMENT

List last 5 Employers	Employer and Address	Immediate Supervisor	Started Mo.-Yr.	Left Mo.-Yr.	Position Held	Pay Rate (Salary)	Reason for Leaving
Last or Present Job							
Second Previous							
Third Previous							
Fourth Previous							
Fifth Previous							

COMPLETE REVERSE SIDE

PERSONAL REFERENCES (DO NOT LIST RELATIVES, PRESENT OR FORMER EMPLOYEES OF TARGET STORES)

Name	Name
Address	Address
City	City
Occupation	Occupation

I affirm that my answers to the foregoing questions are correct and true and that I have not withheld any fact that would discredit my application. I understand that to qualify for regular employment I must submit to and pass a physical examination by a company-designated doctor. I also understand that my previous employment record and personal references must be satisfactory to Target Stores.

I also understand that any false statement in this application will be cause for dismissal.

This does not constitute a contract.

Signature _____ Date _____

DO NOT WRITE HERE FOR OFFICE USE ONLY

Dept. _____ Job Title _____ DX ☐ New Hire ☐

Starting Date _____ Starting Time _____ Temporary ☐ Rehire ☐

Starting Rate _____ Interviewer _____ Regular ☐ Transfer ☐

DO NOT WRITE BELOW THIS LINE

Interviewers Comments

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WELCOME to Country Club Markets, Inc. We are happy to consider you as an applicant, and we ask that you complete all the blanks on this form, so that we can give you full consideration.

NAME _____ DATE _____ HOME PHONE NO. _____
(First) (Middle) (Last)

PRESENT ADDRESS _____
(No.) (Street) (City) (Zone) (State)

POSITION APPLIED FOR _____ Full Time ☐ Part Time ☐ Salary Expected _____

Sex: Male ☐ Female ☐ Date of Birth _____ 19____ Height ____ ft. ____ in. Weight ____ lbs.
Social Security Number _____

Single ☐ Married ☐ Separated ☐ Engaged ☐ Widowed ☐ Divorced ☐ Date of Marriage _____
No. of Children _____ Their Ages _____ No. Other Dependents _____ Ages _____
Are You a Citizen of the U.S.? Yes ☐ No ☐ Birth Certificate or Maiden Name _____

Do you: Own Your Home? ☐ Rent? ☐ Live With Relatives? ☐ Board? ☐ With Friends? ☐ Other _____
Is Your Wife (Husband) Employed? No ☐ Yes ☐ What Kind of Work? _____
If Married Woman, First Name of Husband _____
In Case of Emergency, Notify _____
(Name) (Relationship) (Phone)

EDUCATION

Type of School	Name and Address of School	Courses Majored In	Circle Last Year Attended	Graduate? Give Degrees	Last Year Attended
Elementary			5 6	Yes ☐ No ☐	19
Jr. High School			7 8 9	Yes ☐ No ☐	19
High School			10 11 12	Yes ☐ No ☐	19
College			1 2 3 4	Yes ☐ No ☐	19
Business School	A.				19
	B.				19
Correspondence or Night School	A.				19

List Scholastic Honors and Extra Curricular Activities _____

How Did You Happen to Apply at Country Club? (Applied Voluntarily, Answered Want Ad, Referred by Country Club Employee) _____

List Relatives Now Working for Country Club and Their Relationship _____

Were You Ever Employed by Country Club? Yes ☐ No ☐ If So, When and Where? _____

PERSONAL

Do You Have Any Physical Defects? _____
What Operations, Illnesses, or Accidents Have You Had in Recent Years? _____
Are You Willing to Take a Physical at Company Expense? _____ Have You Ever Been Committed to an Institution? _____
Are You An Alcoholic Now? Yes ☐ No ☐ Have You Ever Been? Yes ☐ No ☐
Have You Ever Been Arrested for Anything Other Than Traffic Violations? Yes ☐ No ☐
Are You Now, or Have You Ever Been a Member of the Communist Party? Yes ☐ No ☐
Are You Willing to Take a Polygraph (lie detector) Test Any Time During Your Employment with Country Club? Yes ☐ No ☐

If You Are Applying for Part Time Work, What Hours Are You Available? 33
Monday _____ Tuesday _____ Wednesday _____ Thursday _____ Friday _____ Saturday _____

(COMPLETE OTHER SIDE)
Over

30

WORK HISTORY

(Record U.S. Military Service As a Position)

List below the names of all your former employers, beginning with the most recent, a. Employer's Name b. Business Address	Kind of Business	Time Employed				Nature of Work	Starting Salary	Salary at Leaving	Reasons for Leaving	Name of Immediate Superior
		From		To						
		Mo.	Yr.	Mo.	Yr.					
1. a. b.										Name Title
2. a. b.										Name Title
3. a. b.										Name Title
4. a. b.										Name Title
5. a. b.										Name Title
6. a. b.										Name Title
7. a. b.										Name Title
8. a. b.										Name Title

34 J1

Indicate by number any of the above employers whom you do not wish us to contact. Every bonded? ☐ No, ☐ Yes; On what jobs?

References (Not Former Employers or Relatives)	Address	Phone Number
1.		
2.		

I understand that any falsification of information on this application will be cause for immediate dismissal.

_____ DATE _____

(signature)

DO NOT WRITE IN THIS SPACE.

Courtesy of Penny's Supermarkets

FOR OFFICE USE ONLY	
Possible Work Locations	Possible Positions

APPLICATION FOR EMPLOYMENT

(PLEASE PRINT PLAINLY)

FOR OFFICE USE ONLY	
Work Location	Rate
Position	Date

PERSONAL

Date: _____

Name _____ Social Security No. _____
Last First Middle Initial

Present address _____ Telephone No. _____
No. Street City State Zip

How long have you lived at above address? _____ Are you a citizen? _____

Previous address _____ How long did you live there? _____
No. Street City State Zip

Date of birth _____ Sex: M F Height _____ ft. _____ in. Weight _____ lbs.
Month Day Year

Marital Status: Single ☐ Engaged ☐ Married ☐ Separated ☐ Divorced ☐ Widowed ☐ Date of Marriage _____

Number of dependents including yourself _____ Number of children _____ Their ages _____

Does your wife/husband work? If yes, what kind? _____ His or her earnings $ _____ per week

Do you own your own home? Pay rent? _____ Monthly rent (if you rent) _____ Own a car? _____

Do you have any physical defects? If yes, describe _____

Have you had a major illness in the past 5 years? If yes, describe _____

Have you received compensation for injuries? If yes, describe _____

_____

Position(s) applied for _____ Rate of pay expected $ _____ per week

Would you work Full-Time _____ Part-Time _____ Specify days and hours if part time _____

Were you previously employed by us? _____ If yes, when? _____

List any friends or relatives working for us _____
Name Relationship

_____
Name Relationship

Have you ever been convicted of a crime? _____ If yes, describe in full _____

_____

_____

If your application is considered favorably, on what date will you be available for work? _____ 19____

Person to be notified in case of accident or emergency

_____
Name Address

_____
Phone Number

Are there any other experiences, skills, or qualifications which you feel would especially fit you for work with the Company? _____

_____

The Civil Rights Act of 1964 prohibits discrimination in employment practice because of race, color, religion, sex or national origin. PL 90-202 prohibits discrimination because of age.

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(Turn to Next Page)

RECORD OF EDUCATION

School	Name and Address of School	Course of Study	Years Attended		Check Last Year Completed				Did You Graduate?	List Diploma or Degree
			From	To						
Elementary					5	6	7	8	☐ Yes ☐ No	
High					1	2	3	4	☐ Yes ☐ No	
College					1	2	3	4	☐ Yes ☐ No	
Other (Specify)					1	2	3	4	☐ Yes ☐ No	

MILITARY SERVICE RECORD

What is your present Selective Service classification? _____

Were you in U.S. Armed Forces? Yes _____ No _____ If yes, what Branch? _____

Dates of duty: From _____ (Month Day Year) To _____ (Month Day Year) Rank at discharge _____

List duties in the service including special training _____

Have you taken any training under the G.I. Bill of Rights? _____ If yes, what training did you take? _____

PERSONAL REFERENCES (Not Former Employers or Relatives)

Name and Occupation	Address	Phone Number

List below all present and past employment, beginning with your most recent

I

Name and Address of Company and Type of Business	From Mo.	From Yr.	To Mo.	To Yr.	Describe in detail the work you did	Weekly Starting Salary	Weekly Last Salary	Reason for Leaving	Name of Supervisor

II

Name and Address of Company and Type of Business	From Mo.	From Yr.	To Mo.	To Yr.	Describe in detail the work you did	Weekly Starting Salary	Weekly Last Salary	Reason for Leaving	Name of Supervisor

III

Name and Address of Company and Type of Business	From Mo.	From Yr.	To Mo.	To Yr.	Describe in detail the work you did	Weekly Starting Salary	Weekly Last Salary	Reason for Leaving	Name of Supervisor

IV

Name and Address of Company and Type of Business	From Mo.	From Yr.	To Mo.	To Yr.	Describe in detail the work you did	Weekly Starting Salary	Weekly Last Salary	Reason for Leaving	Name of Supervisor

V

Name and Address of Company and Type of Business	From Mo.	From Yr.	To Mo.	To Yr.	Describe in detail the work you did	Weekly Starting Salary	Weekly Last Salary	Reason for Leaving	Name of Supervisor

Have you ever been bonded? _____ If yes, on what jobs? _____

May we contact the employers listed above? _____ If not, indicate by No. which one(s) you do not wish us to contact _____

The facts set forth above in my application for employment are true and complete. I understand that if employed, false statements on this application shall be considered sufficient cause for dismissal.

_____

Signature of Applicant

3.1

APPLICANT — Do not write on this page

FOR INTERVIEWER'S USE

INTERVIEWER	DATE	COMMENTS

FOR TEST ADMINISTRATOR'S USE

TESTS ADMINISTERED	DATE	RAW SCORE	RATING	COMMENTS AND INTERPRETATION

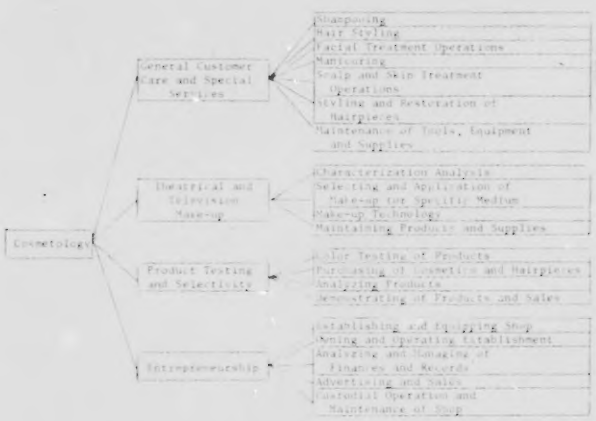
REFERENCE CHECK

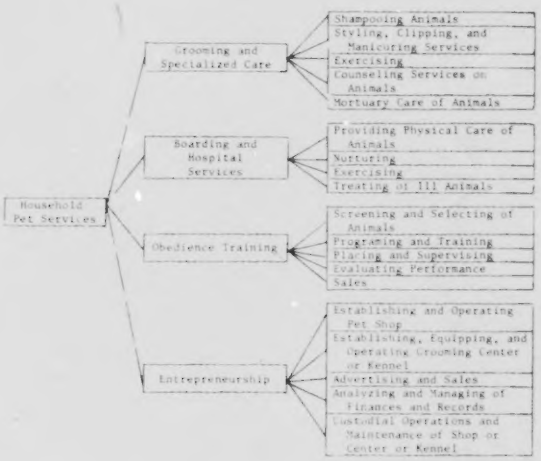
*Position Number	RESULTS OF REFERENCE CHECK	*Position Number	RESULTS OF REFERENCE CHECK
I		IV	
II		V	
III			

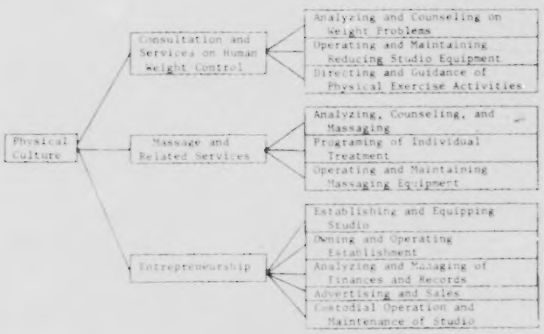
*See Page 3

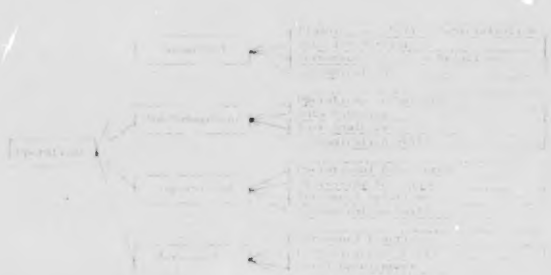
This "Application For Employment" is prepared for general usage throughout the United States. V. W. Eimicke Associates, Inc. assumes no responsibility for the inclusion in said "Application" of any questions which may violate local and/or State law.

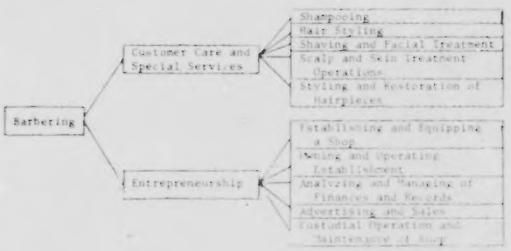
Cluster for
PERSONAL SERVICES OCCUPATIONS






Physical Culture
Consultation and Services on Human Weight Control
Analyzing and Counseling on Weight Problems
Operating and Maintaining Reducing Studio Equipment
Directing and Guidance of Physical Exercise Activities
Massage and Related Services
Analyzing, Counseling, and Massaging
Programing of Individual Treatment
Operating and Maintaining Massaging Equipment
Entrepreneurship
Establishing and Equipping Studio
Owning and Operating Establishment
Analyzing and Managing of Finances and Records
Advertising and Sales
Custodial Operation and Maintenance of Studio





35A

INDIVIDUAL DISCIPLINE UNIT FORMAT

Introduction

- Skill Objectives
- Techniques

Overview

Career Objectives

Specific Concepts

Materials Needed

Possible Activities

Classroom Questions

DISCIPLINE INTRODUCTION

MATH

Math teachers can increase the effectiveness of their teaching and help their students formulate plans for the future by presenting the occupational implications of math. This can be done by offering a formal unit on careers in math or by taking advantage of opportunities to present occupational information incidentally as they arise.

The purpose of these materials is to present possible activities that are a combination of both approaches. Neither are they the large scale insertion of a formal unit requiring great amounts of class time, nor an incidental approach risking incomplete coverage, but rather a short term activity designed to illustrate the real necessity of varying math competencies in a wide variety of occupations.

Suggested Skill Objectives

- Is able to gain information by listening and observing
- Clarifies his purpose or theme
- Is able to empathize with others, seeing things through their eyes, whether he accepts their viewpoint or sympathizes with them or not
- Helps create and preserve an atmosphere in which all members of a group feel secure and eager to participate
- Checks, refines, and eliminates hypotheses, working out new ones where necessary
- Acquires information through reading:
  - Reads for details which support or contradict generalizations and main ideas
  - Is able to interpret tables, graphs, and charts

Techniques

- Role playing
- Simulation
- Discussion
- Reading for information
- Films and filmstrips
- Slides
- Observations
- Community resource people

SEVENTH GRADE MATH

OVERVIEW

Seventh grade math investigates:

Basic concepts
- Addition
- Subtraction
- Multiplication
- Division

These are to include, in general:

- Set theory
- Numeration systems
- Whole numbers
- Integers
- Factoring and prime numbers
- Fractions
- Decimals
- Ratio and proportion
- Geometry
- Measurement

Specific teaching concepts to be emphasized in the unit presented are:

- Self
- Socialization
- Role
- Identification

SEVENTH GRADE MATH

Career Objectives

Helping the student view self as a worthy person

Helping the student experience success

Helping the student appreciate his own potentials and interests

Helping the student develop a positive self-image

Specific Concepts

Role
Identification
Association
Interdependence
Services
Self
Socialization (values and attitudes)

Materials Needed

Canoe trip information sheet
Scale map
Community resource people
Names of outfitters from seventh grade science unit

Possible Activities

I. Self realization in math: In the activities which follow, the student will be reinforced in his discovery that math is very important to his everyday life. More importantly, most students will become aware that they can succeed in the math that many occupations use.

In this activity, the students are to plan the time-table for a weeks' canoe trip to show them how math is applicable to leisure activities as well as to occupations.

A scale map portraying the size of lakes and distances of portages will be provided each group. (Be sure to include boys and girls in each group). The task(s) of each group will be to determine the maximum distance that the group could cover in a weeks' time. The group will take into consideration:

A. Length of time (in hours) needed to travel portages as they are related to the terrain and supplies.
B. Weight of equipment and supplies in relation to both their water and land traveling speed in miles per hour.
C. Distance (in miles) and speed (per hour) which can be traveled by males.

D. Distance (in miles) and speed (per hour) which can be traveled by females.
E. Weather's affect upon water and land travel (in miles per hour).
F. Time measured in hours needed for rest activities and meals.
G. Number of canoes needed to carry campers and supplies.
H. Total distance (in miles) the group can travel in one day's time.

To initiate this activity, the teacher should direct the students into small groups of four to five boys and girls. At this time, the canoe trip information sheet and the scale map of the canoe country should be given to each group. The students, through discussion, will then determine the values of the items on the canoe information sheet. If questions regarding tasks arise, the students could contact community resource people who are directly involved with this type activity. Some examples are guides, outfitters, and/or sporting goods dealers. With information gained from this exercise, the students then will be able to solve the tasks outlined previously in this lesson. The math skills previously acquired will be applied to this activity.

II. All-school party. This activity exposes students to a situation that all of them are familiar with, but possibly unaware of the math concepts involved.

It will be the students' task to completely plan the events and activities for an all-school party. Arrangements to be made and information to be considered are:

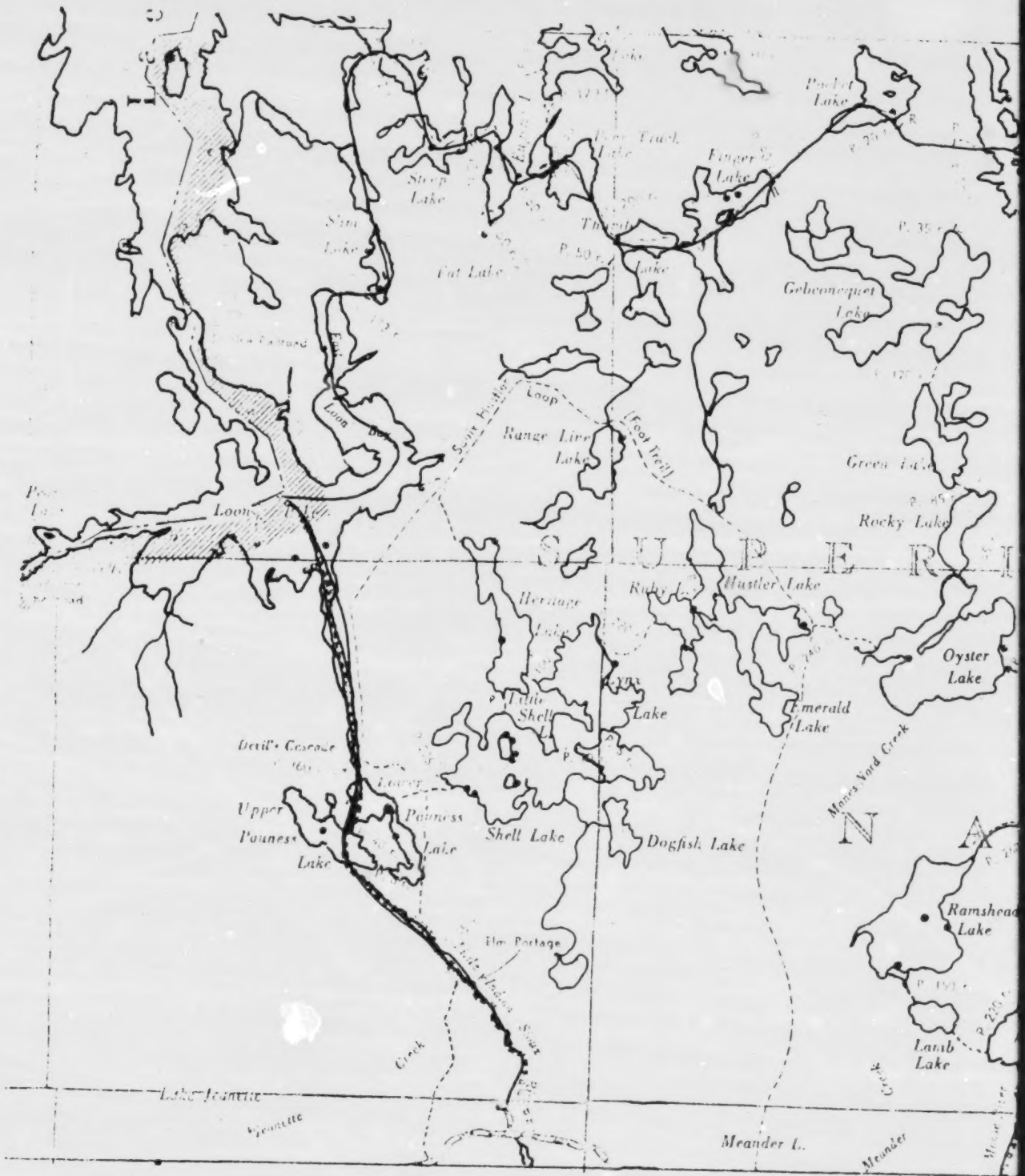
1. Total school enrollment
2. Projected ticket sales
3. Cost of tickets (note: is there any fee for printing tickets)
4. Cost of cleanup and supervision
5. Cost of activities such as fortune-telling, fish pond, dunk for marshmallows in flour
6. Cost of musical entertainment
7. Cost of refreshments
8. Cost of repairs
9. Cost of decorations

Because of the differences in schools and the changes in attitudes about entertainment, individual teachers will have to take this problem from this point. Suggestions for speakers or sources of information include representative from custodial services, musicians' union, and a person working with concessions.

SEVENTH GRADE MATH

CANOE TRIP INFORMATION SHEET

SPEED ON WATER--MILES PER HOUR	CALM	BREEZY	STORMY
BOYS			
GIRLS			
SPEED ON LAND--MILES PER HOUR	LEVEL	HILLY	WET
BOYS			
GIRLS			
CARRY CAPACITY--POUNDS	LEVEL	HILLY	WET
BOYS			
GIRLS			
CANOE CARRYING CAPACITY--POUNDS	CALM	BREEZY	STORMY
14-FOOT			
16-FOOT			
REST ACTIVITIES--HOURS	CALM	BREEZY	STORMY
MEALS			
RELAXATION			
SUPPLY WEIGHT NEEDED PER CAMPER--POUNDS	SURVIVAL LEVEL	INTERMEDIATE LEVEL	LUXURY LEVEL
BOYS			
GIRLS			
SPEED ON WATER--MILES PER HOUR	CALM	BREEZY	STORMY
SURVIVAL LEVEL			
INTERMEDIATE LEVEL			
LUXURY LEVEL			
SPEED ON LAND--MILES PER HOUR	CALM	BREEZY	STORMY
SURVIVAL LEVEL			
INTERMEDIATE LEVEL			
LUXURY LEVEL			



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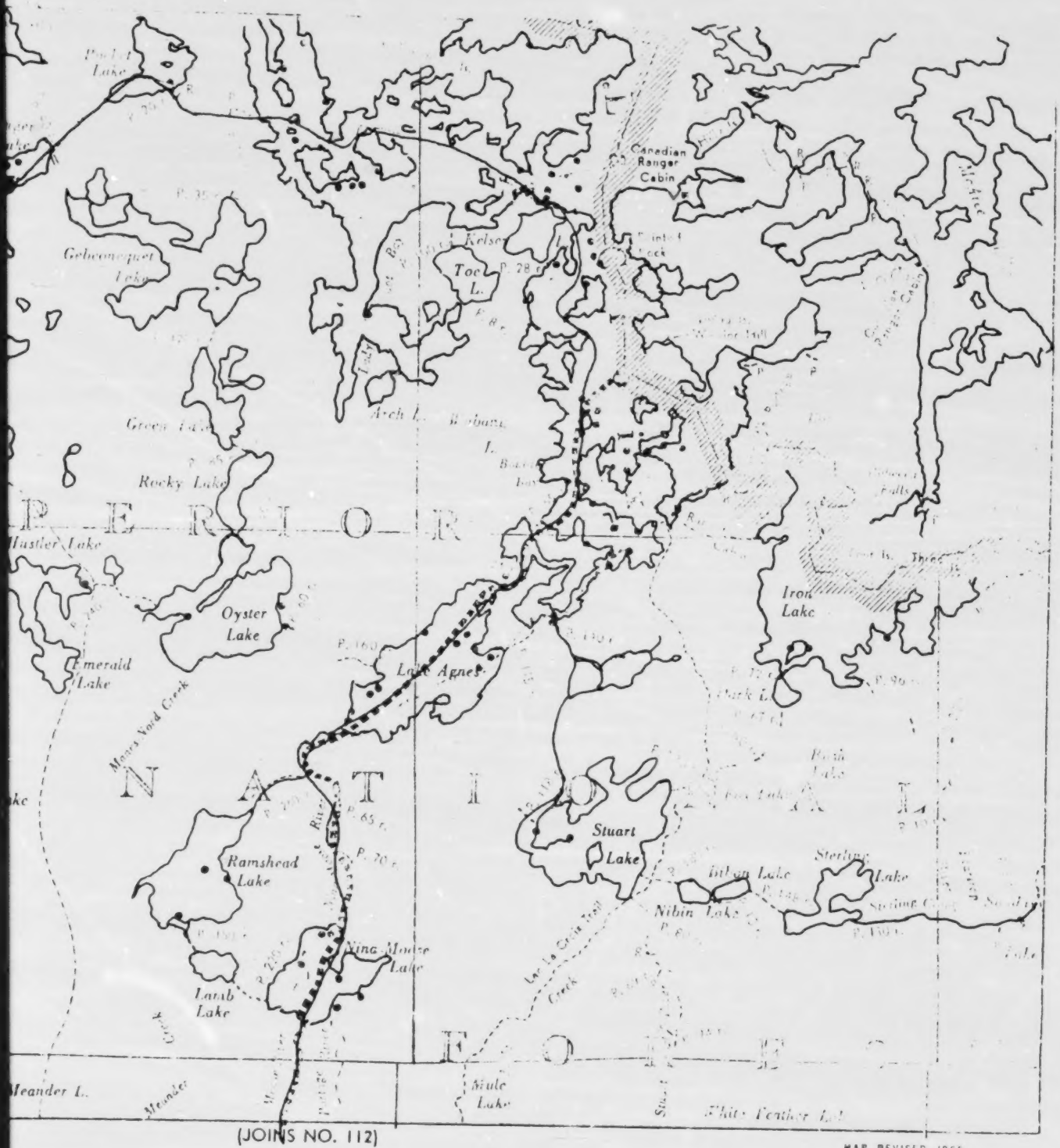
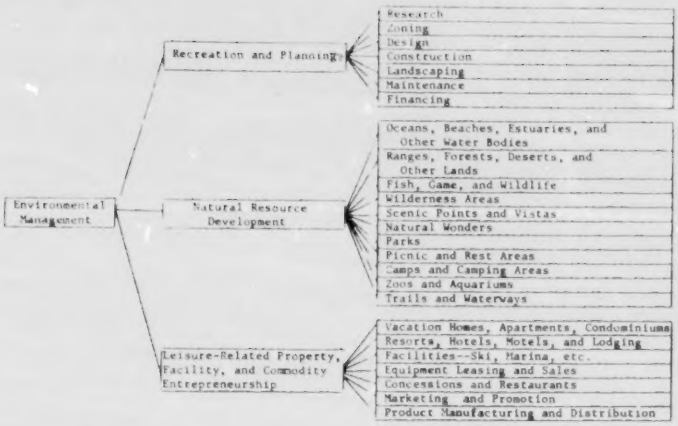
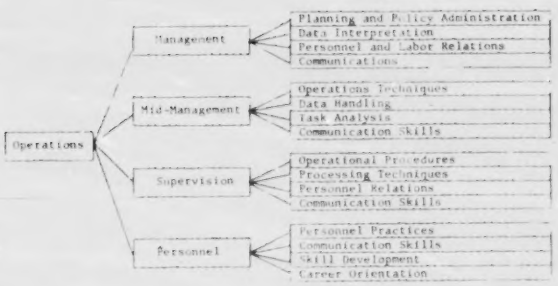

Canadian Ranger Cabin
Toe L.
Rocky Lake
Hustler Lake
Oyster Lake
Emerald Lake
Lake Agnes
Iron Lake
Stuart Lake
Ramshead Lake
Nina Moose Lake
Lamb Lake
Nibin Lake
Sterling Lake
Mule Lake
PERIOR
NATIO
(JOINS NO. 112)
MAP REVISED 1965

41 B

Cluster for

HOSPITALITY AND RECREATIO





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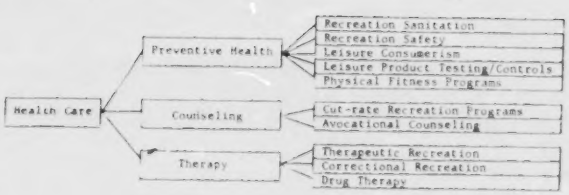
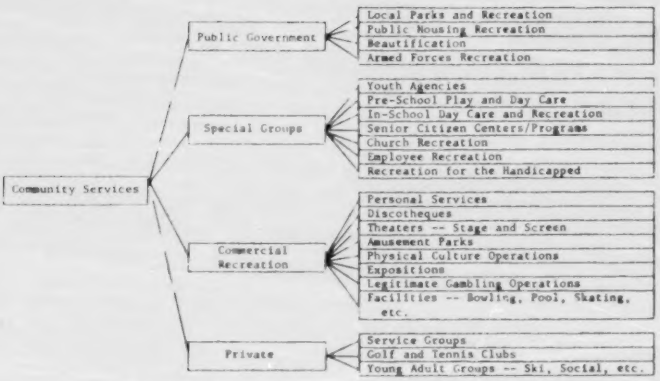
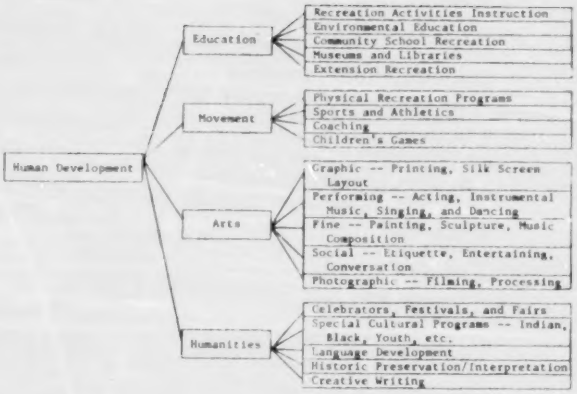
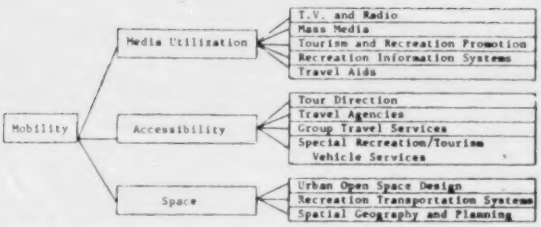


Cluster for

)SPITALITY AND RECREATION







EIGHTH GRADE MATH

OVERVIEW

Eighth grade math investigates:

- Rational numbers
- Plane figures
- Equations

These are to include, in general:

- Addition, subtraction, multiplication, and division of rational numbers
- Geometric figures
- Scientific notation
- Metric system
- Decimal figures
- Probability

Specific teaching concepts to be emphasized in the unit presented are:

- Values
- Self
- Association
- Identification

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EIGHTH GRADE MATH

Career Objectives

Helping the student expand his knowledge of career-vocational information and identify career opportunities within a community

Helping the student assess the extent to which technological change may affect the employment opportunities and task requirements of a preferred occupation

Helping the student become aware of the variety of the opportunities within each job cluster

Specific Concepts

Values
Conflicts
Civil liberties
Decision-making process
Discrimination

Materials Needed

Math interest sheets
Sample interview questions

Possible Activities

I. Math is an integral part of all jobs. While some occupations call for the use of technical mathematical concepts almost all jobs use some math. To illustrate this fact each student will select members of his family, friends, or neighbors to interview. Some of the questions which might be asked could be:

1. How much math do you use on your job? (Be specific--example: housewife uses all facets of math every day just in the act of preparing a meal.)
2. What is an example of how you do use math?
3. How much math training did you have in school?
4. Could more training in math change your job opportunities?

After completing the interviews, the student will tabulate the results and report his findings to the class.

After completing the activities above, introduce the math interest sheets. Encourage the students to use the information gained from the interviews as background for the interest rating of each of the job selections.

Students should be encouraged to further pursue job clusters of their high occupational interests as they relate to math.

II. What's My Line--a math occupations game. This game will utilize the job interest sheets developed in activity I. After picking a job title which holds reasonably high interest for him, the student will explore the mathematical aspects of the job and develop a set of math problems that might be involved in this job choice. A "What's My Line" panel would then be formed, with each student taking his turn on the panel. Each panelist would introduce himself and give a math example illustrating how math is used in his chosen job. Using their math job interest sheets from activity I, the audience would question the panel to discover the specific job each is portraying. When an audience participant discovers one of the panelist's occupations, he would take the panelist's place. This process would continue until all class members have participated in the panel.

EIGHTH GRADE MATH

MATH INTEREST SHEET

	High Interest	Slight Interest	No Interest
OCCUPATIONS FOR WHICH MATH IS A MAJOR DETERMINANT			
Accountant			
System analyst			
OCCUPATIONS FOR WHICH MATH IS A CODETERMINANT			
Airplane inspector			
Airplane mechanic			
Airplane pilot			
Architect			
Astronomer			
Banker			
Broker			
Cashier			
Draftsman			
Economist			
Electrician			
Engineer			
Geologist			
Home Economist			
Machinist			
Marine Engineer			
Meteorologist			
Pharmacist			
Salesman			
Surveyor			
OCCUPATIONS FOR WHICH MATH IS A CONTRIBUTING FACTOR			
Bank teller			
Bookkeeper			
Carpenter			
Clerical Worker			
Construction worker			
Exporter-importer			
Farm manager			
General office clerk			
Insurance clerk			
Inventor			
Merchandise manager			
Medical X-ray technician			
Office machine operator			
Office manager			
Optometrist			
Patternmaker			
Payroll Clerk			
Plumber			
Retail Manager			
Secretary			
Stenographer			
Tax attorney			
Timekeeper			

NINTH GRADE MATH

OVERVIEW

Ninth grade math investigates:

- Addition and multiplication
- Equations
- Proof

These are to include, in general:

- Sets
- Fractions, decimals, and percents
- Negative numbers
- Equations
- Ratio, proportion, and variation
- Vectors
- Proof

Specific teaching concepts to be emphasized in the unit presented are:

- Role
- Association
- Interdependence
- Socialization

Career Objectives

Helping the student explore interrelationship and interdependence between jobs

Helping the student evaluate the relevance of his own aptitudes and abilities for broad occupational areas

Helping the student relate his value concepts to a variety of job choices

Helping the student examine occupations in terms of his current life style, considering such factors as personal and parental aspiration, family background, and personal values

Helping the student identify the personal compromises he may have to make in order to attain a chosen occupational job

Specific Concepts

Role	Money and credit
Association	Culture
Interdependence	Environment
Services	Incentives
Socialization	Competition
Self	Institutions
Scarcity	Models
Resource	Status
Distribution	Labor

Materials Needed

Information on metric system
Community resource people
"Planning a House" resource sheet

Possible Activities

I. Planning a house; a study of the construction career cluster.

Because of the wide number of jobs involved in the construction industry, this activity illustrates well the interdependence between various segments of a job cluster. In addition, it is economically significant not only to those employed in the field, but to virtually all members of society.

An integral part of this activity is the developing awareness and listing of the occupations involved in each step of construction. Included with this listing the student should provide examples of the mathematics

problems involved in each occupation. For the use of the teacher during this activity and for the students at the end of the activity, a number of construction jobs and possible related math problem areas are listed on the enclosed resource sheet.

The teacher will provide for each student a lot plan similar in size and configuration to those common in the local community. Utilizing this parcel of land, the student will design to scale a complete floor plan for single family dwelling in accordance with local building requirements (such as 1000 square foot one floor minimum, set back and sewage disposal).

The steps involved in the process of the planning of the home will be:

1. Design the home
2. Acquire financing
3. Locate the building on the lot and excavate
4. Construct footings and basement
5. Do capping and rough framing
6. Enclose the structure
7. Begin electrical, plumbing, and heating construction
8. Do the interior walls
9. Finish interior construction
10. Finish mechanical construction (heat, electric, plumbing)
11. Have utilities hooked up
12. Do the basic decorating (paint, stain, varnish)
13. Complete the final interior decorating (drapes, carpet, shades)
14. Do the final grading and landscaping

As a part of this activity students could profit greatly from visits by speakers involved in the construction industry and ventures into the community to talk to resource people.

II. Metric measurement in occupations. This activity should culminate the study of metric measurement and conversion. At this time the students should realize the importance of metric conversion in industry. From all indications, the metric system will eventually become a universally accepted system of measurement. At the present time the United States and the United Kingdom are the only countries which do not use the metric system entirely.

In this activity, the student will be assigned the task of investigating the aspects of a job involving metric measurement. The job under investigation will be selected by chance (drawing from the hat). Sample occupations could be:

Race driver
Garage mechanic
Secretary
Lawyer
Homemaker
Doctor
Pharmacist
Heavy equipment operator

Map maker
Carpenter
Dressmaker
Surveyor
Teacher
Landscaper
Chemist
Nurse
Clerk
Tool and die maker
(See job cluster sheets for further material.)

Regardless of what occupation the student selects, the investigation should include the different ways that metric measurement would be used in that job. The activity should show to the student the importance of mastering the metric system for occupational competence.

NINTH GRADE MATH

PLANNING A HOUSE RESOURCE SHEET

Construction Jobs	Possible Math Areas
Lumber dealer	Board feet, area
Surveyor	Area, volume
Mason	Ratio, area
Heavy equipment operator	Ratio, area
Carpenter (rough and finish)	Board feet, measurement, angles
Electrician	Ampere hours, watts, ohms, measurement
Well driller	Distance, psi
Plumber	Psi, distance, measurement
Landscaper	Area
Painter	Area, proportion
Heating	BTU, volume, area, thermal expansion
Sheet metal	Volume, area
Sheet rocker	Area, board feet, expansion
Taper	Area, measurement
Concrete (cement man)	Area, cubic square yards
Roofer	Area, square yards
Cabinet maker	Measurement
Bricklayer	Ratio, measurement, angles
Flooring	Square feet area
Carpet layer	Square feet area
Sewage disposal	Depth, volume, area
Electrical hookup	Distance, depth
Utility hookup	Distance, depth
Interior decorator	Area, measurement
Combination window installer	Area, measurement
Tile setter	Area, measurement

Sylvia Porter

Minneapolis Tribune
Friday, July 30, 1971

Miss Universe measuring 91-61-91? Her escort a handsome 1.83 meters tall? The two of them hesitating to taste a celebration cake because it includes a mere 15 grams of butter?

Yes, we're going metric.

The National Bureau of Standards of the Department of Commerce has reached the long-awaited decision to recommend nationwide conversion from our present incredibly tangled system of weights and measures to the incredibly simple metric system now in use in virtually all the major nations of the globe—and Commerce Secretary Maurice Stans has asked congressional approval.

The decision is the result of a $2.5-million study authorized in 1968 under which thousands of corporations, educators, government agencies and consumers were canvassed on their attitudes toward the switchover. Overwhelmingly, they favored the conversion.

It's a certainty we will go metric—although Congress must vote when we'll convert and how we'll pay for it.

It's a certainty, too, that the switch will be coordinated by the federal government, for conversion costs, in terms of retooling, redesigning and repackaging, have been estimated at from $10 billion to $100 billion. Particularly hard hit will be small businesses, the machine tool industry, manufacturers of screws and fasteners, industries which will have to repackage and reprice tens of thousands of items.

It defies belief, but the United States, which prides itself on being the industrial leader of the world, has been until now the only great industrial nation not converting to the metric system.

But we are going metric—and one towering reason why is that the cost of not converting is getting too steep. We're losing an estimated $10 to 20 billion a year in exports simply because of our clumsy, unfamiliar weights and measures. Countless millions are being wasted on scientists and technicians who must make endless conversions back and forth between the two systems. Countless more millions are being lost in expensive and time-consuming errors inherent in the conversions.

In contrast, there are only three basic metric units: The gram for weight, the liter for volume, the meter for length. Everything is divided into units of 10, 100 and 1,000. The prefix "milli" means one/1000th. The prefix "centi" means one/100th. The prefix "deci" means one/10th. The prefix "kilo" means 1,000.

There are 1,000 grams in a kilogram (2.2 pounds); 1,000 meters in a kilometer (little more than a half mile); 1,000 liters in a kiloliter (a liter is a little more than a quart). A centimeter is one/100th of a meter (a meter is a little longer than a yard). A millimeter is one/1000th of a meter.

And that's it. You can learn the whole system in an hour.

(P.S. Her measurements are 36-24-36; his height is six feet; they won't eat that cake with a tablespoon of butter.)

Cluster for
CONSTRUCTION

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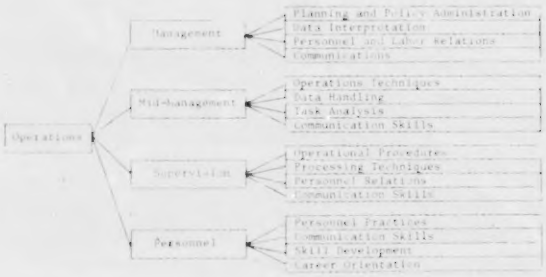

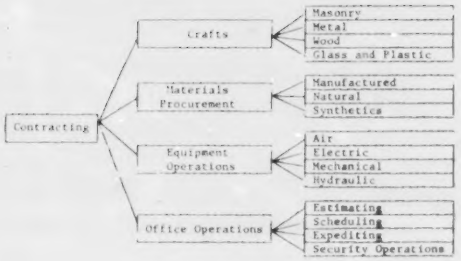

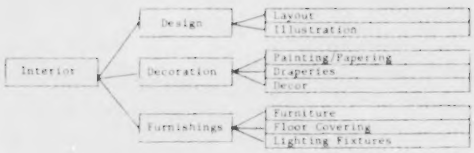

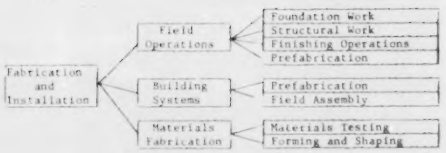

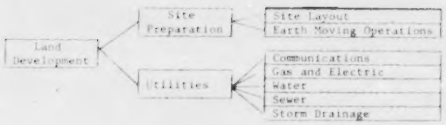

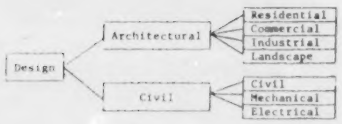

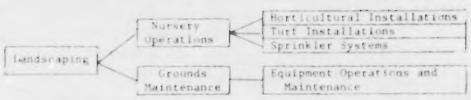

51 A

INDIVIDUAL DISCIPLINE UNIT FORMAT

Introduction

- Skill Objectives
- Techniques

Overview

Career Objectives

Specific Concepts

Materials Needed

Possible Activities

Classroom Questions

DISCIPLINE INTRODUCTION

SCIENCE

The purpose of this project is to relate science-oriented occupations to the science curriculum currently used by many schools in the state of Minnesota. These programs are highly objective in nature and do not always lend themselves to furthering career development in the classroom. However, because of its importance in today's technical age, the teacher has a responsibility to find and encourage those students interested in the science-related fields of today and the future.

The materials that follow offer possibilities for inter-disciplinary projects which would assist in making science more related to everyday activities and future job opportunities.

Suggested Skill Objectives

Is able to gain information by listening and observing
Clarifies his purpose or theme
Is able to empathize with others, seeing things through their eyes, whether he accepts their viewpoint or sympathizes with them or not
Helps create and preserve an atmosphere in which all members of a group feel secure and eager to participate
Checks, refines, and eliminates hypotheses, working out new ones where necessary
Acquires information through reading:
Reads for details which support or contradict generalizations and main ideas
Is able to interpret tables, graphs, and charts

Techniques

Role playing
Simulations
Discussion
Reading for information
Films and filmstrips
Slides
Observations
Community resource people

SEVENTH GRADE SCIENCE

OVERVIEW

Seventh grade science explores the world of life around us:

- Cellular nature of food
- Food for life maintainence
- Internal and external control
- Mechanisms of reproduction and inheritances
- Evolution and speciation
- Population structure and dynamics
- Classification of organisms
- Organization of the biosphere
- Interaction of biosphere

These are to include, in general:

- Ecology
- Forestry
- Agriculture
- Wildlife

Specific teaching concepts to be emphasized in the unit presented are:

- Identification
- Role
- Interdependence
- Socialization
- Self

SEVENTH GRADE SCIENCE

Career Objectives

Helping the student view self as a worthy person

Helping the student experience success

Helping the student appreciate his own potentials and interests

Helping the student develop a positive self-image

Specific Concepts

Role
Identification
Association
Interdependence
Services
Self
Socialization (values and attitudes)

Materials Needed

Films
Resource personnel
Copies of the Interest Sheet
Text: Interaction of Man and the Biosphere
• Rand McNally and Co., Chicago, Ill., 1970
Job cluster sheet
Interest survey sheet
Camping supplies checklist
"Food and Drug Inspector," Careers, Inc.,
Largo, Fl, 33540, 20¢, 1970
"Careers in Agribusiness and Industry," Stone, Archie A.,
Interstate Printers and Publishers, 19-27 N. Jackson St.,
Danville, Ill. 61832, $5.95, 1970
"Plant Pathologist," Careers, Inc.,
Largo, Fl. 33540, 20¢, 1969

In order to clarify the following activities, it might be helpful to point out that the pride of the craftsman is in danger of being lost. People too often work on an assembly line, do their task, and seldom feel they are a part of the finished product. Self-esteem and personal fulfillment should be emphasized. The following activities are intended to reinforce these values and attitudes.

Possbile Activities

I. Exploration of wildlife conservation: Introduce this activity with a good film and/or speaker dealing with wildlife conservation.

This activity will not only stress the job clusters involved with these areas, but will also emphasize areas which involve almost everyone who enjoys the outdoors. This activity can be used in conjunction with or after a unit dealing with the sections on "Man and Nature" and "Ecological Interactions" in Interaction of Man and the Biosphere.

Because this seventh grade science class has worked well together and has done an outstanding job we have been given permission to go on a canoe trip together this summer. A lot of planning and preparation is necessary before we can leave on our adventure into the wilderness area. Every person will have certain responsibilities for gathering information to be used in planning a successful trip. Some of us probably have not ever been involved in planning a vacation like this, so before we start, let us see what types of things we think are important to have with us. Here is a list of things that may or may not be necessary to take along. Work through these items and be able to tell why you think certain things are important.

X	Large steel tackle box
X	Food coolers
_____	Tent repair kit
X	Radio
_____	Extra paddles
_____	Waterproof matches
X	Make up kit for girls
_____	Prunes
_____	Baggies
_____	Extra rope
X	Coleman stove and lantern
_____	Flashlight
X	Heavy coat or jacket
_____	First aid kit

Note: Those items marked with an X are not necessary. (This is for the teachers' information.)

We have found that some things are not important to take along, but other things are very necessary. Now let us organize our trip. Some of the things that we are going to have to plan for are:

1. Hunting and fishing
2. Food
3. Transportation--highway and water
4. Investigation of wild life in the area and field trip possibilities
5. Safety, health, and sanitation
6. Supplies (other than food)
7. Itinerary
8. Equipment maintainence and repair

Possible sources of information for these groups are the following:

Canoe Outfitters:

Voyageur Canoe Outfitters
1300 14th Avenue
International Falls, Minnesota 56649

Boundary Waters Canoe Outfitters
Dept. MT -- Box 447
Ely, Minnesota 55731

Janet's Outfitters
Box 9
Grand Marais, Minnesota 55604

Irv Funk Outfitters
R. R. 2 Box 51
Sebeka, Minnesota 56477

Wilderness Waters
Box 512T
Grand Marais, Minnesota 55604

Bill Rom
Ely, Minnesota 55731

BWCA Headquarters
Ely, Minnesota 55731

When you contact people for information, keep track of the types of jobs these people hold in the field of conservation and recreation.

After each group has gotten all its information, it will make a report to the class about its decisions and about the occupations of the people from whom it received its information. Provision should be made for additional contributions and ideas from the rest of the class.

II. Food industry resource unit: In connection with, or as a follow-up to the science unit on "How Food Is Used" (Sec. 5 -- text: Interaction of Man and the Biosphere), this activity can be used to relate job opportunities in the food processing industry to the material already covered.

Explore possible job opportunities through the following resource people: (Make use of the community resources program to utilize local people.)

1. Food handler specialist (such as head cook, dietician) to explain the menu, health requirements, and dietetic value.
2. Restauranteur to discuss both state and federal regulations governing food handling.
3. Representative of the food packaging industry to explain packaging and coding.
4. Speaker about truth in packing.
5. Food and drug inspector.
6. Films and other visual aids related to the food industry.

III. Agriculture: Since we have discussed the food industry in the previous unit, the agriculture job cluster will be used in the third and fourth units.

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Give the students the interest survey sheet (which is included in this packet) from which they can assess their level of interest in occupations in the agriculture industry. From this the students will develop an awareness that the agriculture industry is one of many facets.

After students have completed the interest sheets, allow time for a general discussion of the worksheet, and/or a tabulation of the results.

A follow-up by individual students in areas of particular interest can be done in the form of independent study projects, reports, displays, posters, and booklets. Students could also check want ads, farm journals, and/or magazines to find out about job availability.

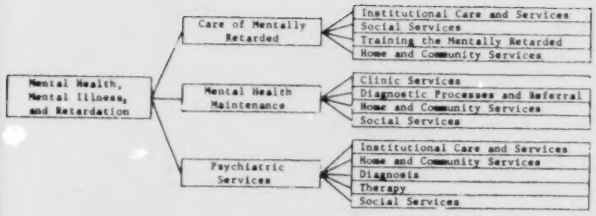
IV. Occupational awareness: myth and reality: Discuss a variety of occupational categories (forest ranger, lawyer, businessman, veterinarian, teacher, politician). Have students state what they think of when they hear the word lawyer, for example. Some of their reactions might include areas of how these people dress and talk, physical appearance, what they have to do in their work, and the good and bad aspects of their job. During this discussion it may be necessary to repeatedly point out that the students associate certain ideas with particular job titles (stereotypes). After the previously mentioned occupations have been discussed the job category of the farmer should be presented. Students will then follow the same procedure of discussion; however, this time the teacher should make certain that the students are aware that the farmer is a composite of many of the previously mentioned individuals, and is a good example of a worker who does see his product from beginning to end, in many cases.

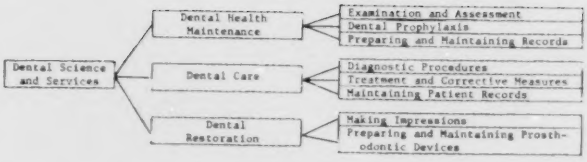
SEVENTH GRADE SCIENCE

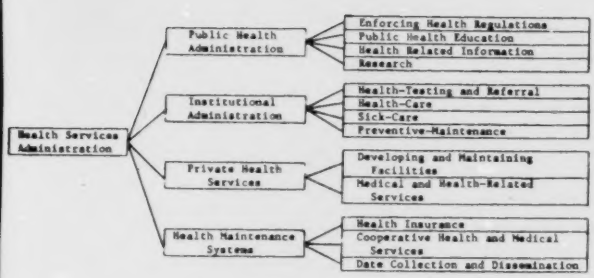
INTEREST SURVEY

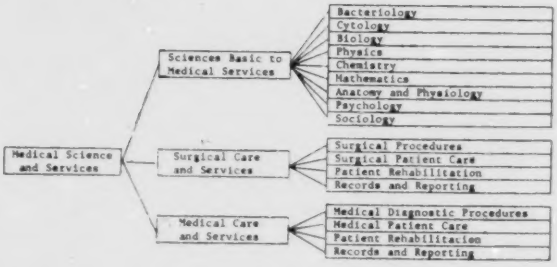
	High Interest	Some Interest	Slight Interest	No Interest
AGRICULTURAL PRODUCTION				
Farming and Ranching				
Farm Managers				
Hatcherymen				
Custom Worker				
AGRICULTURAL SUPPLIES				
Grain Elevator Employee				
Garden Center Employee				
Custom Sprayer				
Seed Salesman				
AGRICULTURAL MECHANIZATION				
Agricultural Machinery Service Center Employee				
Agricultural Machinery Dealer				
Agricultural Representative for Electrical Co. or Coop.				
Farm Equipment Operator				
AGRICULTURAL PRODUCTS				
Agricultural Inspector or Grader				
Butcher or Meat Processor				
Frozen Food Processor				
Milk Processor				
Dairy Herd Inspection Agent				
Livestock Buyer				
HORTICULTURE				
Nurserymen				
Florist				
Landscape Aide				
Golf Course Employee				
Arborist				
Gardener				
Greenhouse Operator				
AGRICULTURAL RESOURCES				
Conservation Service Employee				
Wildlife Conservation Officer				
Fish Hatcheryman				
Recreation Farm Manager				
FORESTRY				
Forester				
Saw Mill Operator				
Christmas Tree Grower				
Lumberman				
Logger				
Park Employee				
OTHER AGRICULTURE (SPECIFY)				
Teacher				
County Agent				
Farm Loan Officer				
Farm Insurance Adjuster				

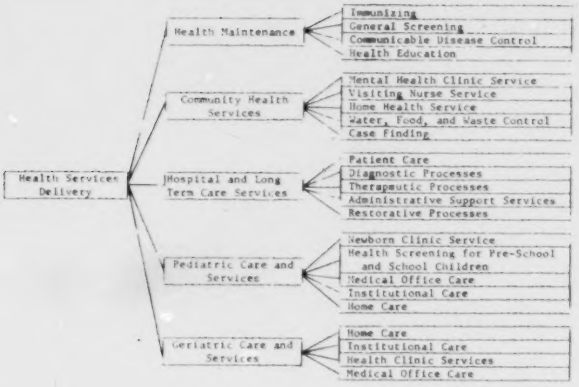
Cluster for
HEALTH OCCUPATIO











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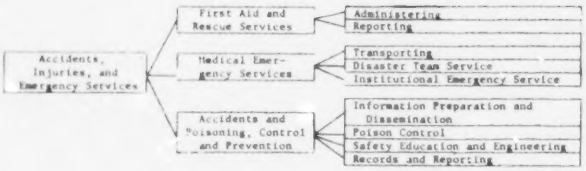
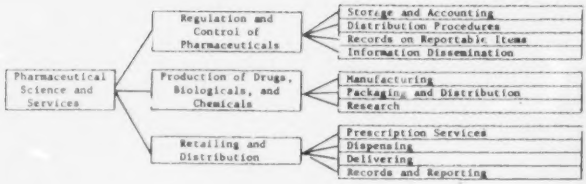
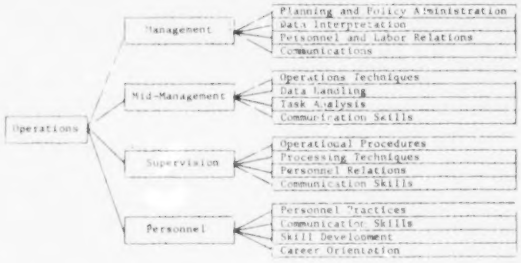
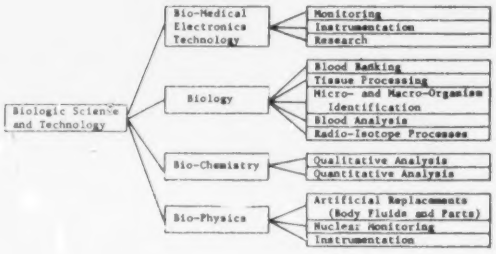
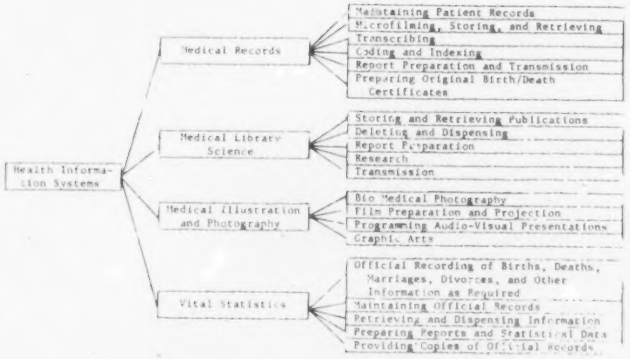










EIGHTH GRADE SCIENCE

OVERVIEW

Eighth grade science explores the earth:

- Dynamic earth
- Earth cycles
- Farth's biography
- Earth's involvement in space

These are to include, in general:

- Climate
- Oceanography
- Geology
- Astronomy

Specific teaching concepts to be emphasized in the unit presented are:

- Communication
- Humanization
- Environment
- Culture
- Interdependence
- Socialization
- Self
- Identification
- Association

Career Objectives

Helping the student expand his knowledge of career-vocational information and identify career opportunities within a community

Helping the student assess the extent to which technological change may affect the employment opportunities and task requirements of a preferred occupation

Helping the student become aware of the variety of the opportunities within each job cluster

Specific Concepts

Values
Conflicts
Civil liberties
Decision-making process
Discrimination

Materials Needed

Filmstrip series: "Oceanography - Understanding Our Deep Frontier," Encyclopedia Britannica series
Film: "Challenge of the Ocean"
Film: "Climate and the World We Live in"
Meteorology: Programmed Unit by Encyclopedia Britannica
Teacher references: Text: Investigating the Earth, Houghton, Mifflin Co., Boston, 1967
Berrill, N. J. The Life of the Ocean, McGraw-Hill,
Clarke, A. C. The Challenge of the Sea, Holt, Rinehart and Winston
"Ask Any Forester," Society of American Foresters, 1010 16th St. N.W. Washington, D. C. 20036, 5¢, 1969
"Opportunities in Oceanography Careers," Vocational Guidance Manuals, Universal Publishing and Distributing Corp., 235 E. 45th St., New York, N. Y. 10017, $1.95, 1969
Forestry, "Buck Ranger," Alexander, G. L. Chronicle Guidance Publications, Inc., Moravia, N. Y. 13118, 35¢, 1969

Possible Activities

I. Weather: After or during your study of the unit on climate, arrange to have a local television or radio weather broadcaster speak to the class. (This speaker should be a person who has had training in meteorology. For example, the weathermen from WCCO television and radio have had extensive training in this area.) This person could relate the kinds of tasks involved in preparing the weather presentation. Also, have the speaker describe the many other persons employed by the station that are directly or indirectly related to getting the weather news on the air. With the information they have gained from the speaker and with more investigation into the areas

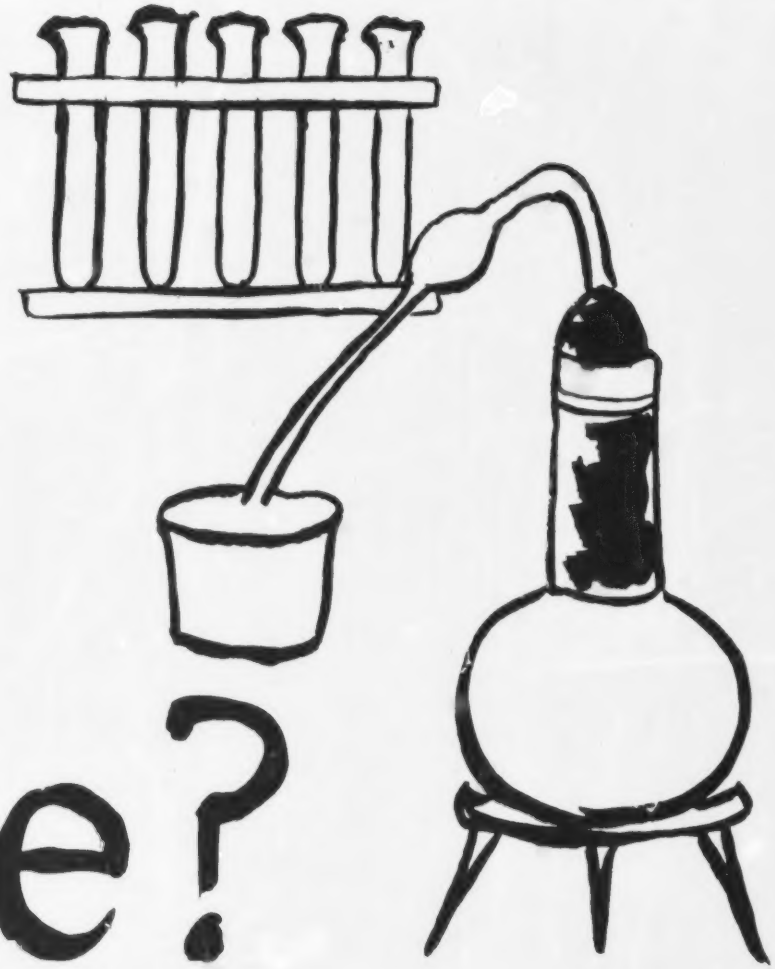
involved in weather broadcasting, the students could get into a role-playing situation involving a broadcast.

1. Students will have to identify the jobs necessary for weather broadcasting.
2. Students will make written applications for the jobs they would like to have. They will have to state that they have the qualifications and the skills necessary to perform that job.
3. A board, consisting of students and possibly the teacher, will then review the applications and assign the occupations.
4. Facilities should be set up in your classroom which will enable you to do weather forecasting and broadcasting.
5. This project could then be presented for any duration of time; if desirable, regular broadcasts could be set up in the school using the all-school intercom for daily broadcasts.

II. Frontiers under the sea: Because of the pressures of population and pollution on the land masses of the world, man is being forced to seek new habitations beneath the sea. Total earth pollution and resource devastation has made the earth unfit for human life. Within a period of so many months, a certain portion of the inhabitants of the world will be forced to move under the sea. A limited number will be selected to go, and your "ticket" for survival will be the choice of a job that is absolutely necessary to the establishment and continued existence of the colony. It will be the general task of the students during the rest of this activity to determine which occupations they consider necessary in the new culture in order to justify their role in this new environment. They will ultimately have to justify these occupations in front of the class by stating their roles and their necessity to the new environment. The students can gain information for the completion of this project through:

1. Speakers
2. Job cluster sheets
3. Films
4. IMC and guidance office vocational materials and personnel

Jobs in Science?



62A

Place Edinet

Place Edinet sheets here

Ask "EDINET"

(Who's that? Ask your teacher or counselor.)

62B

NINTH GRADE SCIENCE

OVERVIEW

Ninth grade science explores:

Introduction to physical science

Its purpose is to give all students a beginning knowledge of physical science and offers some insight into the means by which scientific knowledge is acquired.

These are to include, in general:

Mass
Volume
Density
Separation of mixtures
Thermal expansion
Elasticity
Ratio and proportion
Gases

Specific teaching concepts to be emphasized in the unit presented are:

Interdependence
Identification
Role
Socialization

NINTH GRADE SCIENCE

Career Objectives

Helping the student explore interrelationships and interdependence between jobs

Helping the student evaluate the relevance of his own aptitudes and abilities for broad occupational areas

Helping the student examine occupations in terms of his current life context, considering such factors as personal and parental aspirations, family background, and personal values.

Helping the student identify the personal compromises he may have to make in order to attain a chosen occupational goal

Specific Concepts

Role
Association
Interdependence
Services
Socialization
Self
Scarcity
Resource
Distribution
Money and credit
Culture
Environment
Incentives
Competition
Institutions
Models
Status
Labor

Materials Needed

Newspapers and magazines
Bulletin board materials
Speakers from community resource program
Census figures from Minnesota Employment Office
EDINET bulletin board enclosures
Honeywell EDINET Program
available from Honeywell, Inc., Minneapolis, Minnesota

Possible Activities

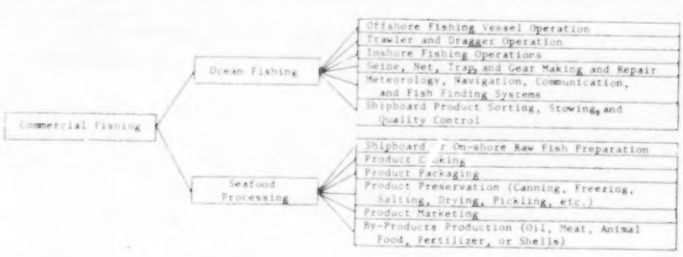
I. The study of science is, of course, directly related to the preparation for many occupations, but it is also important for the student who does not intend to make a career in this field to realize how important basic scientific understandings are for everyday life. In order to achieve this goal, the students should be given a series of projects which can relate to all science activities during the year. The following are sample projects which should be presented to the students early in the year:

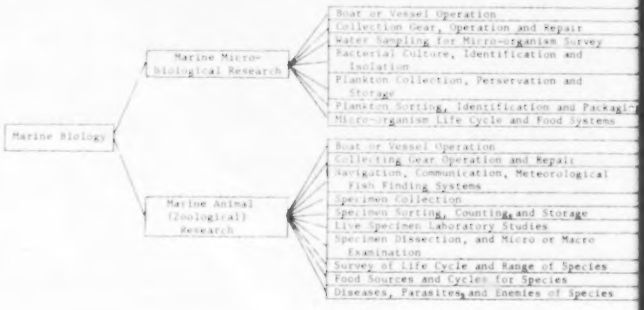
A. Have students bring in newspaper and magazine articles describing scientific discoveries and the importance of science in modern times.

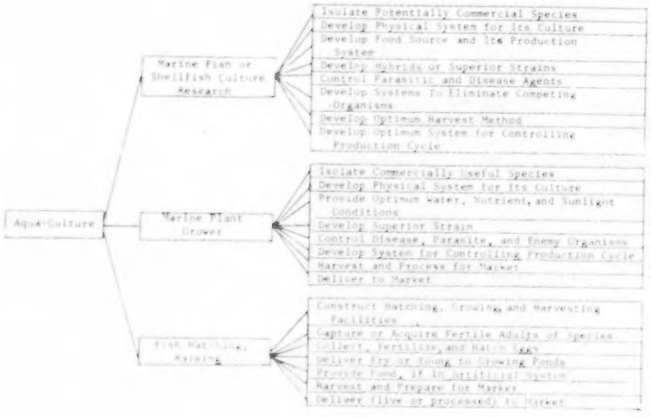
Cluster fo
MARINE SCIENCE O

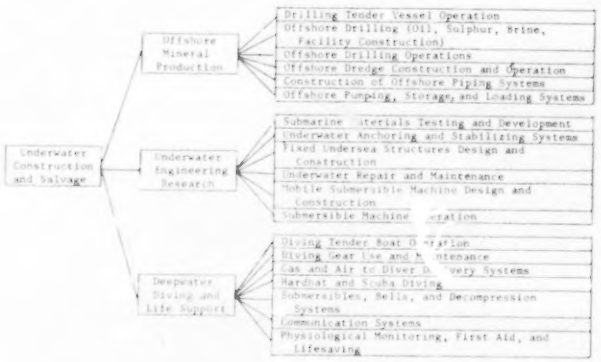
Marine Transportation — (See Cluster for Transportation)

Marine Biology — Marin' Ecology Re


Commercial Fishing
Ocean Fishing
Offshore Fishing Vessel Operation
Trawler and Dragger Operation
Inshore Fishing Operations
Seine, Net, Trap, and Gear Making and Repair
Meteorology, Navigation, Communication, and Fish Finding Systems
Shipboard Product Sorting, Stowing, and Quality Control
Seafood Processing
Shipboard / On-shore Raw Fish Preparation
Product Cooking
Product Packaging
Product Preservation (Canning, Freezing, Salting, Drying, Pickling, etc.)
Product Marketing
By-Products Production (Oil, Meat, Animal Food, Fertilizer, or Shells)


Marine Biology
Marine Micro-Biological Research
Boat or Vessel Operation
Collection Gear, Operation and Repair
Water Sampling for Micro-organism Survey
Bacterial Culture, Identification and Isolation
Plankton Collection, Perservation and Storage
Plankton Sorting, Identification and Packagi-
Micro-organism Life Cycle and Food Systems
Marine Animal (Zoological) Research
Boat or Vessel Operation
Collecting Gear Operation and Repair
Navigation, Communication, Meteorological Fish Finding Systems
Specimen Collection
Specimen Sorting, Counting, and Storage
Live Specimen Laboratory Studies
Specimen Dissection, and Micro or Macro Examination
Survey of Life Cycle and Range of Species
Food Sources and Cycles for Species
Diseases, Parasites, and Enemies of Species


Aqua-Culture
Marine Plant Grower
Isolate Commercially Useful Species
Develop Physical System for Its Culture
Provide Optimum Water, Nutrient, and Sunlight Conditions
Develop Superior Strain
Control Disease, Parasite, and Enemy Organisms
Develop System for Controlling Production Cycle
Harvest and Process for Market
Deliver to Market
Marine Plant or Shellfish Culture Research
Isolate Potentially Commercial Species
Develop Physical System for Its Culture
Develop Food Source and Its Production System
Develop Hybrids or Superior Strains
Control Parasitic and Disease Agents
Develop Systems To Eliminate Competing Organisms
Develop Optimum Harvest Method
Develop Optimum System for Controlling Production Cycle
Fish Hatching, Raising
Construct Hatching, Growing, and Harvesting Facilities
Capture or Acquire Fertile Adults of Species
Collect, Fertilize, and Hatch Eggs
Deliver Fry or Young to Growing Ponds
Provide Food, If In Artificial System
Harvest and Prepare for Market
Deliver (live or processed) to Market


Underwater Construction and Salvage
Offshore Mineral Production
Drilling Tender Vessel Operation
Offshore Drilling (Oil, Sulphur, Brine, Facility Construction)
Offshore Drilling Operations
Offshore Dredge Construction and Operation
Construction of Offshore Piping Systems
Offshore Pumping, Storage, and Loading Systems
Underwater Engineering Research
Submarine Materials Testing and Development
Underwater Anchoring and Stabilizing Systems
Fixed Undersea Structures Design and Construction
Underwater Repair and Maintenance
Mobile Submersible Machine Design and Construction
Submersible Machine Operation
Deepwater Diving and Life Support
Diving Tender Boat Operation
Diving Gear Use and Maintenance
Gas and Air to Diver Delivery Systems
Hardhat and Scuba Diving
Submersibles, Bells, and Decompression Systems
Communication Systems
Physiological Monitoring, First Aid, and lifesaving

Marine (Oc
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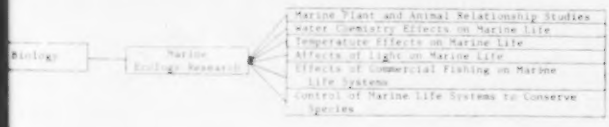
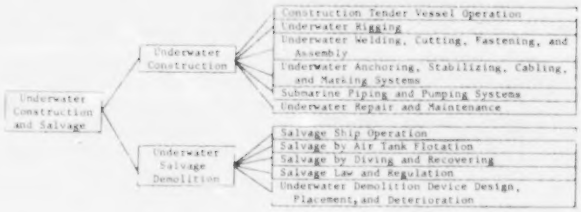
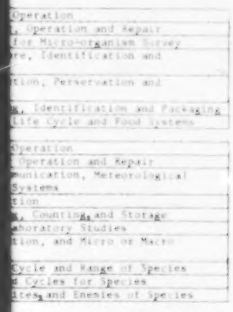
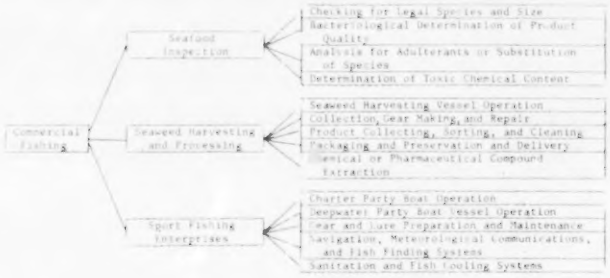
Explorati

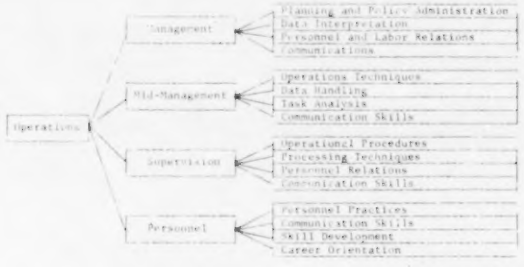
Cluster for
SCIENCE OCCUPATIONS

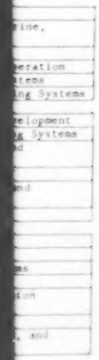

Biology
Marine Ecology Research
Marine Plant and Animal Relationship Studies
Water Chemistry Effects on Marine Life
Temperature Effects on Marine Life
Effects of Light on Marine Life
Effects of Commercial Fishing on Marine Life Systems
Control of Marine Life Systems to Conserve Species


Underwater Construction and Salvage
Underwater Construction
Construction Tender Vessel Operation
Underwater Rigging
Underwater Welding, Cutting, Fastening, and Assembly
Underwater Anchoring, Stabilizing, Cabling, and Marking Systems
Submarine Piping and Pumping Systems
Underwater Repair and Maintenance
Underwater Salvage Demolition
Salvage Ship Operation
Salvage by Air Tank Flotation
Salvage by Diving and Recovering
Salvage Law and Regulation
Underwater Demolition Device Design, Placement, and Deterioration




Commercial Fishing
Seafood Inspection
Checking for Legal Species and Size
Bacteriological Determination of Product Quality
Analysis for Adulterants or Substitution of Species
Determination of Toxic Chemical Content
Seaweed Harvesting and Processing
Seaweed Harvesting Vessel Operation
Collection, Gear Making, and Repair
Product Collecting, Sorting, and Cleaning
Packaging and Preservation and Delivery
Chemical or Pharmaceutical Compound Extraction
Sport Fishing Enterprises
Charter Party Boat Operation
Seepwater Party Boat Vessel Operation
Gear and Lure Preparation and Maintenance
Navigation, Meteorological Communications, and Fish Finding Systems
Sanitation and Fish Cooling Systems





Marine Oceanographic) Exploration
Oceanographic Mapping and Charting
Oceanographic Vessel Operation
Airborne Photogrammetric and Instrumental Survey
Instrumentation Use and Repair
Depth Sounding and Charting
Bottom Sampling and Charting
Monitoring and Charting Dynamic Change
Hydrographic Topographical Map and Chart Production
Ocean Mineral Exploration
Photogrammetric or Air-borne Instrument Surveys
Geological Interpretation of Undersea Topography
Chemical Analysis of Water and Bottom Samples
Underwater Drilling, Sampling, and Seismographic Surveying
Ocean Current and Water Research
Oceanographic Vessel Operation
Water Sampling, Temperature, and Chemical Analysis
Fixed or Free Floating Buoy Instrument Systems
Aerial Photographic Monitoring
Ocean Current Chart and Map Production
Meteorological and Seasonal Effects of Ocean Currents

Marine Biology
Marine Plant (Botanical) Research
Boat or Vessel Operation
Collecting Gear Operation and Repair
Navigation, Communication, Meteorological, and Plant Finding Systems
Specimen Collection
Specimen Sorting, Counting, and Storage
Live Specimen Laboratory Studies
Specimen Dissection, and Micro or Macro Examination
Survey of Life Cycle and Range of Species
Nutrient Sources and Cycles for Species
Diseases, Parasites, and Enemies of Species
Sedimentation, Turbidity and Sunlight Effects on Marine Plant Life
Marine Biology Laboratory Management
Acquisition of Facilities, Vessels, and Equipment
Operation and Maintenance of Equipment
Chemical Laboratory Services
Botanical and or Zoological Laboratory Services
Specimen Storage and Shipping Services

64B

B. Prepare a bulletin board showing the contributions of science to agriculture, health, transportation, communication, and other fields. Use the bulletin board material as the basis for a class discussion on the importance of science to national defense and the promotion of international affairs.

C. Have students clip help-wanted advertisements from the classified section of a newspaper. Discuss the importance of scientific occupations in national and international affairs.

D. Help the class develop a list of hobbies in which scientific knowledge and skills are helpful. Encourage students without hobbies to consider some of those listed.

E. Ask a representative of one of the local health services to speak to the class on the applications of science in his field.

F. Have students keep records of their spare-time activities for a week. At the end of the week discuss the applications of science in their recreational pursuits.

G. Using census figures, compare the number of workers in scientific and related occupations today with the number in previous years to show th[illegible]ployment trends in the various occupations. Relate scientific developments to employment trends in these occupations.

II. Following is a listing of occupations that make use of specific material that is studied in science. Making the students aware of these opportunities and their great diversity will help them to better understand how science relates to them in everyday life and future careers.

Occupations involving mass calculations
- Nurse
- Geologist
- Housewife

Elasticity
- Metallurgist
- Gymnast
- Car racing
- Furniture manufacturer

Separation of mixtures
- Pharmacist
- Liquor manufacturer
- Cook
- Dietician
- Photographer

Density
- Gas station attendant
- Boat building
- Pilot
- Fireman

Thermal expansion
- Truck drivers
- Construction engineer
  - Bridges
- Housewife
  - Chef
- Pop bottlers

Ratio and proportion
- Baker
- Engineer
- Conservationist
- Teacher
- Race track driver

Gases
- Coal miner
- Scuba diver
- Chemist
- Fireman
- Refrigeration repairman

Volume
- "Wise" consumer
- Store clerk
- Carpenter
- Mason
- Photographer

III. Jobs in Science. This activity is designed to familiarize students with a variety of job opportunities in the field of science.

It is based on the use of the Honeywell Edinet Program which is designed to provide the individual with a wealth of specific career information. If a computer tie-in is not available, these materials are available in print-out form from Honeywell, Inc., Minneapolis, Minnesota.

The fold-out enclosure is a bulletin board display poster. It can be placed permanently, while the Edinet Job Classification half sheets enclosed may be changed periodically.

OCEANOGRAPHY

Exploring The Wonders of The 7 Seas

When man first began to explore the mysteries of the ocean, his efforts were crude and dangerous: Prof. Henri-Milne Edwards, of Sorbonne U., who, in 1844, became the first biologist to make a deep sea dive, did so in a clumsy bucket helmet.

Today, he undoubtedly would be amazed at the diverse number of increasingly complex and sophisticated vehicles that enable man to collect an ever enlarging amount of knowledge about the ocean and its uses.

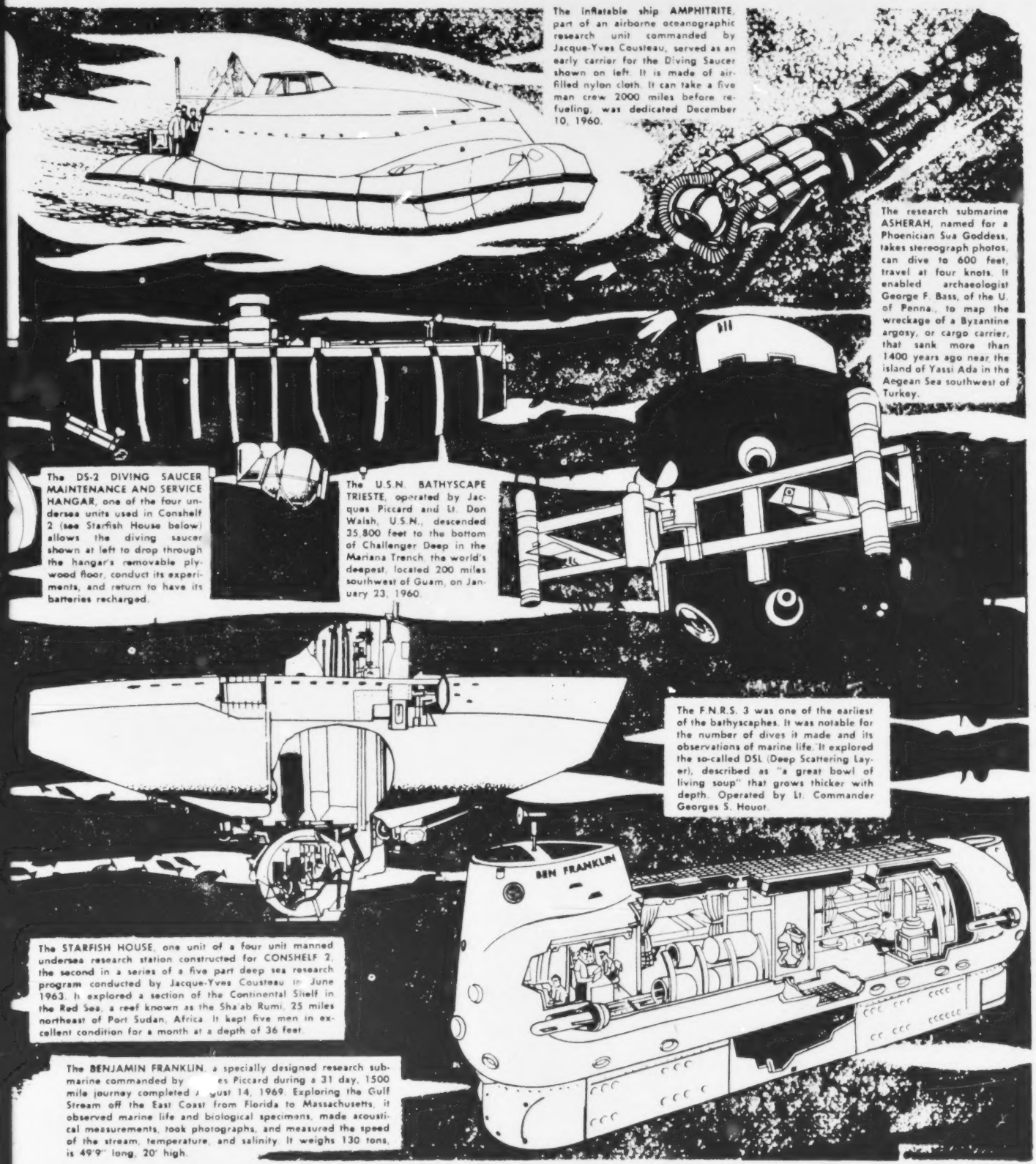
Shown on this mat are a few of those vehicles.

The DS-2 DIVING SAUCER. A mechanical claw tears specimens from the ocean floor, then drops them into a basket under the hull. It is one of the four units used in Conshelf 2 (see Starfish House below).

The DS-2 DIVING SAUCER MAINTENANCE AND SERVICE HANGAR, one of the four undersea units used in Conshelf 2 (see Starfish House below) allows the diving saucer shown at left to drop through the hangar's removable plywood floor, conduct its experiments, and return to have its batteries recharged.

The STARFISH HOUSE, one unit of a four unit manned undersea research station constructed for CONSHELF 2, the second in a series of a five part deep sea research program conducted by Jacque-Yves Cousteau in June 1963. It explored a section of the Continental Shelf in the Red Sea, a reef known as the Sha'ab Rumi, 25 miles northeast of Port Sudan, Africa. It kept five men in excellent condition for a month at a depth of 36 feet.

The BENJAMIN FRANKLIN, a specially designed research marine commanded by Jacques Piccard during a 31 day, mile journey completed August 14, 1969. Exploring the Stream off the East Coast from Florida to Massachuse observed marine life and biological specimens, made ac cal measurements, took photographs, and measured the s of the stream, temperature, and salinity. It weighs 130 is 49'9" long, 20' high.



The inflatable ship **AMPHITRITE**, part of an airborne oceanographic research unit commanded by Jacque-Yves Cousteau, served as an early carrier for the Diving Saucer shown on left. It is made of air-filled nylon cloth. It can take a five man crew 2000 miles before refueling, was dedicated December 10, 1960.

The research submarine **ASHERAH**, named for a Phoenician Sea Goddess, takes stereograph photos, can dive to 600 feet, travel at four knots. It enabled archaeologist George F. Bass, of the U. of Penna., to map the wreckage of a Byzantine argosy, or cargo carrier, that sank more than 1400 years ago near the island of Yassi Ada in the Aegean Sea southwest of Turkey.

The **DS-2 DIVING SAUCER MAINTENANCE AND SERVICE HANGAR**, one of the four undersea units used in Conshelf 2 (see Starfish House below) allows the diving saucer shown at left to drop through the hangar's removable plywood floor, conduct its experiments, and return to have its batteries recharged.

The **U.S.N. BATHYSCAPE TRIESTE**, operated by Jacques Piccard and Lt. Don Walsh, U.S.N., descended 35,800 feet to the bottom of Challenger Deep in the Mariana Trench, the world's deepest, located 200 miles southwest of Guam, on January 23, 1960.

The **F.N.R.S. 3** was one of the earliest of the bathyscaphes. It was notable for the number of dives it made and its observations of marine life. It explored the so-called DSL (Deep Scattering Layer), described as "a great bowl of living soup" that grows thicker with depth. Operated by Lt. Commander Georges S. Houot.

The **STARFISH HOUSE**, one unit of a four unit manned undersea research station constructed for CONSHELF 2, the second in a series of a five part deep sea research program conducted by Jacque-Yves Cousteau in June 1963. It explored a section of the Continental Shelf in the Red Sea, a reef known as the Sha'ab Rumi, 25 miles northeast of Port Sudan, Africa. It kept five men in excellent condition for a month at a depth of 36 feet.

The **BENJAMIN FRANKLIN**, a specially designed research submarine commanded by [illegible]es Piccard during a 31 day, 1500 mile journey completed August 14, 1969. Exploring the Gulf Stream off the East Coast from Florida to Massachusetts, it observed marine life and biological specimens, made acoustical measurements, took photographs, and measured the speed of the stream, temperature, and salinity. It weighs 130 tons, is 49'9" long, 20' high.

Courtesy: Apache Paper Co.
2550 Wabash Ave.
St. Paul, Minn. 55114
% Mr. Lyle Deusterhoeft
647-0127

85 66B

EDINET JOB CLASSIFICATIONS

AIR CONDITIONING
APPLIANCE REPAIR
ARCHITECTURAL ENGINEER
BEAUTICIAN
DAIRY FARMER
FIREMEN
DRAFTSMAN
DRY-CLEANER
ELECTRICIAN
ELECTRICAL ENGINEER
ELECTRONICS
POLLUTION CONTROL

EDINET JOB CLASSIFICATIONS

FOUNDRY WORKER
ATOMIC ENERGY
LINEMAN
PHOTOGRAPHY
MACHINE AND TOOL DESIGNER
METAL WORKING
MINING
MOTOR REPAIR
MEDICAL ASSISTANT
PLUMBING AND PIPEFITTING
PLASTICS
POLICE SCIENCE
RADIO AND TELEVISION

EDINET JOB CLASSIFICATIONS

MECHANIC
WILDLIFE MANAGER
NURSERY AND GREENHOUSE OPERATOR
LOGGING
LANDSCAPING
FORESTRY
FISH (FARMS AND HATCHERIES)
AGRICULTURAL RESOURCES
AGRICULTURAL PRODUCT PROCESSING
AGRICULTURAL POWER AND MACHINERY
FLORIST
ACCOUNTING

EDINET JOB CLASSIFICATIONS

COMPUTER OPERATOR
COMPUTER PROGRAMMER
COMMERCIAL ART
PILOT
AERONAUTICAL ENGINEER
AUTOMOTIVE SERVICE
AUTOMOTIVE BODY AND FENDER
AVIATION
BAKER
BUSINESS MACHINE MAINTENANCE
CARPENTRY
CHEMICAL ENGINEER

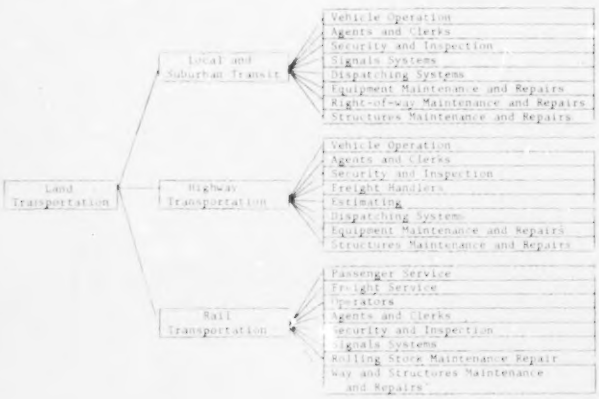
EDINET JOB CLASSIFICATIONS

ROAD CONSTRUCTION
SHIP AND BOAT OPERATION
PRINTING
SOUND RECORDING
SURVEYOR
TRANSPORTATION
WELDING
WOODWORKING
DENTAL ASSISTING
DENTISTS
DIETITIANS
INHALATION THERAPY

EDINET JOB CLASSIFICATIONS

MEDICAL EMERGENCY TECHNICIAN
MENTAL HEALTH TECHNICIAN
UNDERTAKER
NURSING
OCCUPATIONAL THERAPY
PHARMACISTS
PHYSICIANS AND SURGEONS
PSYCHIATRIC AIDE
RADIATION THERAPY
SANITATION ASSISTANT
SCHOOL HEALTH AIDE
VETERINARIAN

Cluster for
TRANSPORTATION



INDIVIDUAL DISCIPLINE UNIT FORMAT

Introduction

Skill Objectives

Techniques

Overview

Career Objectives

Specific Concepts

Materials Needed

Possible Activities

Classroom Questions

EDUCATIONAL OPPORTUNITIES FOR CAREER PREPARATION

(This material is needed for state. Consult the directions on other side.)

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COLLEGES

CODE	NAME
[illegible]	[illegible] Junior College
[illegible]	[illegible] College
[illegible]	[illegible] County College
[illegible]	[illegible] State College
[illegible]	[illegible] College
[illegible]	[illegible] College
[illegible]	Brainerd State Junior College
[illegible]	[illegible] College
[illegible]	[illegible] College, St. Benedict
[illegible]	[illegible] College, St. Catherine
[illegible]	[illegible] College, St. Scholastica
[illegible]	[illegible] College, St. Teresa
[illegible]	[illegible] College, St. Thomas
[illegible]	[illegible] College (Moorhead)
[illegible]	[illegible] College, St. Paul
[illegible]	[illegible] College
[illegible]	[illegible] College, St. Martin Luther College
[illegible]	[illegible] State Junior College
[illegible]	[illegible] College, Concordia College
[illegible]	[illegible] College
[illegible]	[illegible] College
[illegible]	[illegible] State College
[illegible]	[illegible] State Junior College
[illegible]	[illegible] College
[illegible]	[illegible] College, College of St. Thomas
[illegible]	[illegible] College
[illegible]	[illegible] State College
[illegible]	[illegible] State Junior College
[illegible]	[illegible] College
[illegible]	[illegible] College
[illegible]	[illegible] College
[illegible]	[illegible] State College
[illegible]	[illegible] College
[illegible]	[illegible] College
[illegible]	[illegible] College
[illegible]	[illegible]

CODE	NAME
C52	Vermilion State Junior College
C53	Willmar State Junior College
C54	Winona State College
C55	Worthington State Junior College

PRIVATE SCHOOLS

CODE	NAME
P1	Academy for Home Study, Inc.
P2	Academy of Accountancy
P3	Advance Trades School, Inc.
P4	Alexander Hamilton Institute, Inc.
P5	American Automation Training Center, Inc.
P6	American Medical School, Inc.
P7	American School
P8	Art Instruction Schools
P9	Atlantic School
P10	Atlantic School of California
P11	B.I. and Howell Schools
P12	Bryce Institute
P13	Capital Radio Engineering Institute, Inc.
P14	Career Academy, Inc.
P15	Central Technical Institute
P16	Cleveland Institute of Electronics
P17	Columbia School of Broadcasting
P18	Commercial Business School, Inc.
P19	Commercial Trades Institute
P20	Control Data Institute
P21	Data Processing Course: Sponsored by Morris L. Mercer and Associates
P22	Data Processing: Sponsored by Sam Carlson and Associates
P23	Delta Institute of Technology
P24	Diesel Truck Driver Training School, Inc.
P25	Diversified Education, Inc.
P26	Dunwoody Business University
P27	Elbo Systems Corporation
P28	Electronic Computer Programming Institute
P29	Estelle Compton Models Institute
P30	Fashion Careers School
P31	Fashion Photographers School
P32	Fashion Schools
P33	Foreign Service School
P34	Fuller Gas and Oil Maintenance School
P35	Fuels Load Gas School
P36	Gaid Institute
P37	Globe College of Business, Inc.
P38	H & R Block Inc. Income Tax School
P39	Hanson Mechanical Trade School
P40	Hartford Sterling Personnel School
P41	Humboldt Institute, Inc.
P42	IBM Data Processing Education Center
P43	Institute of Business and Computer Education
P44	Insurance Adjusters School
P45	International Accountants Society, Inc.
P46	International Correspondence Schools
P47	Interstate Business College
P48	Jetna Technical Institute
P49	LaSalle Extension University
P50	Lewis Hotel-Motel Schools
P51	Lincoln Extension Institute, Inc.
P52	McConnell Airline School, Inc.
P53	Mankato Commercial College
P54	Medical Institute of Minnesota
P55	Minneapolis Business College
P56	Minneapolis Drafting School
P57	Minnesota Institute of Medical and Dental Assistants
P58	Minnesota School of Bartending, Inc.
P59	Minnesota School of Business
P60	Motel Management Institute
P61	Motel Managers Training Corporation
P62	National Institute of Meat Packing
P63	National Reading Institute of Minnesota, Inc.
P64	Nettleton Commercial College
P65	Northern Technical School of Business
P66	Northwest Schools
P67	Northwest Technical Institute
P68	Northwestern Electronics Institute
P69	Palmer Writers School, Inc.
P70	Patricia Stevens Career and Finishing School
P71	Personal Dynamics, Inc.
P72	Piccadilly, Ltd.
P73	Professional Business Institute
P74	Rasmussen School of Business
P75	Reading Dynamics of Minnesota
P76	Sawyer School of Business
P77	Speed Read Plus
P78	St. Cloud Business College
P79	Sales Training of Twin Cities, Inc.
P80	Star Stars School
P81	State Bar Review Course
P82	United Electronics Institute
P83	United Systems, Inc.
P84	United Technical Institute

CODE	NAME
A39	Draftsman, Mechanical
A40	Draftsman, Ornamental Iron
A41	Electrical Shopman
A42	Electrical Wireman
A43	Electrician, Maintenance
A44	Electrician, Powerhouse
A45	Electrician, (R.R.)
A46	Electroplate
A47	Electroplate, Finisher
A48	Electroplate, Molder
A49	Engineer, Operating (Diesel)
A50	Engineer, Operating (Steam)
A51	Engraver, Hand
A52	Engraver, Steel Die
A53	Feeder
A54	Finisher, Optical
A55	Finisher, Watchglass
A56	Fitter, Sprinkler
A57	Floor Coverer
A58	Furniture Finisher
A59	Furniture Maker
A60	Furrier
A61	Glazier
A62	Glazier, Safety Classcutter and Auto
A63	Glazier, Stained Glass
A64	Grainer, Litho
A65	Granite Polisher
A66	Granite Sand Blastman
A67	Ink Maker, Color Matcher
A68	Iron Worker
A69	Jeweler
A70	Lab Assistant, Litho Chemical
A71	Lab Technician, Optical
A72	Lather
A73	Layout Man, Structural
A74	Lens Grinder, Optical
A75	Lineman, Combination Telephone
A76	Lineman, Electrical Power
A77	Lithographer, Class "C"
A78	Locksmith
A79	Machine Adjuster, Envelope
A80	Machinist
A81	Machinist, Automotive
A82	Machinist, Composing Room
A83	Machinist, Linotype
A84	Machinist, Maintenance
A85	Machinist, Printing Press
A86	Machinist, (R.R.)
A87	Machinist, Tool Room
A88	Machine Operator, Automatic Stitching and Tipping
A89	Machine Operator, Folding
A90	Machine Operator, Gathering
A91	Machine Operator, Glass
A92	Machine Operator, Ruling
A93	Mailer
A94	Marble Setter
A95	Marking Devices Maker, Rubber and Metal
A96	Mechanic, Aircraft and Engine
A97	Mechanic, Auto Body and Fender
A98	Mechanic, Automobile
A99	Mechanic, Business Machine
A100	Mechanic, Farm Tractor and Equipment
A101	Mechanic, Heavy Equipment
A102	Mechanic, Highway Equipment
A103	Mechanic, Line Casting Machine
A104	Mechanic, Motor Truck and Tractor
A105	Mechanic, Plant Maintenance
A106	Mechanic, Sewing Machine
A107	Metal-Smith, Aircraft
A108	Metal Spinner
A109	Meter Tester
A110	Miller
A111	Millwright
A112	Millwright, Maintenance
A113	Moulder
A114	Monument Maker
A115	Offset Forms Assistant, Web
A116	Opaquer, Litho
A117	Operating, Litho Perfecting
A118	Operating, Litho Photo Contact Room
A119	Operator, Litho Offset Davidson
A120	Painter
A121	Painter, Automobile
A122	Painter, Coach
A123	Painter, Sign and Pictorial
A124	Pattern Maker
A125	Photoengraver, Copper Etcher
A126	Photoengraver, Finisher
A127	Photoengraver, Layout Man
A128	Photoengraver, Proofer
A129	Photoengraver, Rotogravuer
A130	Photoengraver, Router and Blocker
A131	Photoengraver, Zinc Etcher
A132	Photographer, (Commercial)
A133	Photographer, Litho Half-Tone Line
A134	Photographer, Photoengraver
A135	Photographer, (Portrait)

A192	Tube Bender, Neon
A193	Upholsterer
A194	Upholsterer, Automotive
A195	Watchmaker

For such services or more specific information, assistance may be furnished by any of the following:

Director
Division of Apprenticeship
110 State Office Building
St. Paul, MN 55101

Bureau of Apprenticeship and Training
U.S. Department of Labor
Room 134, Federal Building
316 Robert Street
St. Paul, MN 55101

Manpower Services, Local Offices

Apprenticeship Information Center
Youth Opportunity Center Offices: St. Paul, Minneapolis, Duluth

HOSPITALS

CODE	NAME
H1	Abbott Hospital School of Nursing
H2	Northwestern Hospital School of Nursing
H3	Arthur B. Ancker Memorial School of Nursing
H4	Fairview Hospital School of Nursing
H5	Hennepin County General Hospital School of Nursing
H6	Lutheran Deaconess Hospital School of Nursing
H7	Methodist Hospital School of Nursing
H8	Naeve Hospital School of Nursing
H9	St. Barnabas Hospital School of Nursing
H10	St. Luke's Hospital School of Nursing
H11	The Swedish Hospital School of Nursing
H12	Bethesda Lutheran Hospital School of Practical Nursing
H13	Miller Hospital Vocational School of Practical Nursing
H14	St. Francis Hospital School of Practical Nursing

VOCATIONAL-TECHNICAL SCHOOLS

CODE	NAME
V1	Albert Lea Area Vocational-Technical School
V2	Alexandria Area Vocational-Technical School
V3	Anoka Area Vocational-Technical School
V4	Austin Area Vocational-Technical School
V5	Bemidji Area Vocational-Technical School
V6	Brainerd Area Vocational-Technical School
V7	Canby Area Vocational-Technical School
V8	Dakota County Area Vocational-Technical School
V9	Detroit Lakes Area Vocational-Technical School
V10	Duluth Area Vocational-Technical School
V11	Faribault Area Vocational-Technical School
V12	Faribault Area Vocational-Technical School
V13	Granite Falls Area Vocational-Technical School
V14	Hibbing Area Vocational-Technical School
V15	Hutchinson Area Vocational-Technical School
V16	Jackson Area Vocational-Technical School
V17	Mankato Area Vocational-Technical School
V18	Minneapolis Area Vocational-Technical School
V19	Moorhead Area Vocational-Technical School
V20	Suburban Hennepin County Vocational-Technical School
V21	Pine City Area Vocational-Technical School
V22	Pipestone Area Vocational-Technical School
V23	Ramsey-Washington County Area Vo-Tech Center 916
V24	Rochester Area Vocational-Technical School
V25	St. Cloud Area Vocational-Technical School
V26	St. Paul Area Vocational-Technical School
V27	Staples Area Vocational-Technical School
V28	Thief River Falls Area Vocational-Technical School
V29	Wadena Area Vocational-Technical School
V30	Willmar Area Vocational-Technical School
V31	Winona Area Vocational-Technical School

OTHER

CODE	NAME
01	Mounds-Midway School of Nursing
02	Crookston School of Practical Nursing
03	Fergus Falls Practical Nursing Program
04	Grand Rapids Practical Nursing Program
05	Hastings Practical Nursing Program
06	Meeker County School of Practical Nursing
07	New Ulm School of Practical Nursing
08	Red Wing School of Practical Nursing
09	Rochester School of Practical Nursing
010	Job Entry Skills Do Not Require Training

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CAREER PLANNING GUIDE

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DIRECTIONS

This is a list of about 500 careers or career areas organized into six general categories. It includes the entire range of jobs available in the United States. Some of these 500 careers have several additional jobs that are related to the ones listed. This list represents careers requiring all levels of education and training. They are listed in the general categories by skill emphasis so be sure to read over all titles in each of the categories. The numbers in parentheses following a career refer to other related career areas that should also be reviewed.

Read the directions carefully. This information will help you in your career planning by providing you with: (1) the breakdown of these occupations into related jobs, (2) sources of information for further study, (3) sources of educational and training requirements and post-high school institutions offering courses of study in these areas.

A. Read over all of the titles.
B. Select those occupations which interest you.
C. Bring your request to the counseling office and you will receive printed information relating to areas 1, 2, and 3 above.

01 AGRICULTURE, FISHING, FORESTRY, ENVIRONMENTAL, AND ECOLOGY OCCUPATIONS

1. Agriculture, Forestry, and Fishing Industry Managers and Officials (16&17)
2. Agricultural Chemicals (16&17)
3. Agricultural Construction and Maintenance (16&17)
4. Agricultural Electrification (16&17)
5. Agricultural Mechanics (16&17)
6. Agricultural Mechanics Skills (16&17)
7. Agricultural Power and Machinery (16&17)
8. Agricultural Production (16&17)
9. Agricultural Products (Processing, Inspection, and Marketing) (16&17)
10. Agricultural Resources (Conservation, Utilization, and Services) (16&17)
11. Agricultural Service Occupations (16&17)
12. Agricultural Structures and Conveniences (16&17)
13. Agricultural Supplies/Services (16&17)
14. Agriculture, Other (16&17)
15. Air
16. Animal Science
17. Arboriculture
18. Dairy Products
19. Farm Business Management (04)
20. Farm Mechanics (16&17)
21. Feeds
22. Fertilizers (Plant Food)
23. Fish (Including Farms and Hatcheries)
24. Floriculture
25. Food Products
26. Forestry Production
27. Forestry, Other
28. Fur (Production, Processing, Management, Marketing, and Services)
29. Greenhouse Operations and Management
30. Landscaping
31. Logging (Harvesting and Transporting)
32. Seafood Products
33. Nursery Operation and Management
34. Ornamental Horticulture (Production, Processing, Marketing, and Services)
35. Plant Sciences
36. Range
37. Recreation (04)
38. Seeds
39. Soil
40. Soil Management
41. Stock Products
42. Turf Management
43. Water
44. Water Management
45. Wildlife (Including Game Farms and Hunting Areas)
46. Wood Utilization

04 DISTRIBUTION, EDUCATION, ENTERTAINMENT, MANAGERIAL, AND BUSINESS ADMINISTRATIVE OCCUPATIONS

1. Advertising Management Occupations
2. Advertising Services
3. Apparel and Accessories
4. Auctioneering
5. Automotive
6. Business Management and Administration (04)
7. Chemicals
8. Communications
9. Construction
10. Consumer Services
11. Cooperative Education
12. Entertainment
13. Finance
14. Floristry
15. Food Distribution
16. Food Service
17. General Merchandise
18. Hardware, Building Materials, and Farm Equipment
19. Hospitality and Recreation
20. Hotel and Lodging Management
21. Industrial Materials
22. Insurance
23. Investments
24. Management Occupations
25. Marketing and Purchasing
26. Personal Services
27. Petroleum
28. Public Utilities
29. Real Estate
30. Recreation, Amusement, and Tourism
31. Small Business Ownership
32. Transportation
33. Vocational Office Education (04)

07 HEALTH OCCUPATIONS

1. Anesthesiology
2. Assisting Occupations
3. Audiology
4. Cardiopulmonary Technology
5. Chiropractic
6. Clinical Laboratory Technology
7. Dental Assisting
8. Dental Hygiene
9. Dental Laboratory Technology
10. Dentistry
11. Dietetics
12. Electrocardiograph Technology
13. Electroencephalograph Technology
14. Emergency Medical Technician
15. Environmental Health Technology
16. Medical Assisting
17. Obstetrical Technician (16&17)
18. Occupational Therapy
19. Ophthalmic
20. Ophthalmic Dispensing
21. Optometrist Assistant
22. Orthopedic Assisting
23. Orthotics
24. Orthoptics
25. Osteopaths
26. Pharmacists
27. Physical Therapy
28. Physicians and Surgeons
29. Prosthetics
30. Psychiatric Aid
31. Psychology Occupations
32. Radiation Therapy
33. Radiological Health Technician (16&17)
34. Radiologic Technology (X-Ray)
35. Radiologic, Other
36. Rehabilitation
37. Sanitation Assistant
38. School Health Aid
39. Surgical Technician (Operating Room Technician) (16&17)
40. Veterinarians

09 HOME ECONOMICS AND PERSONAL HOME SERVICE OCCUPATIONS

1. Care and Guidance of Children
2. Child Development
3. Clothing Management, Production, and Services
4. Clothing and Textiles
5. Comprehensive Homemaking or Home Economics
6. Consumer Education
7. Family Health (07)
8. Family Relations
9. Food and Nutrition (04 - 16&17)
10. Food Management, Production, and Services (04 - 16&17)
11. Home Furnishings, Equipment, and Services
12. Home Management
13. Homemaking, Other
14. Homemaking: Preparation for Personal, Home, and Family Living
15. Housing and Home Furnishings
16. Institutional and Home Management and Supporting Services

14 CLERICAL, BUSINESS, OFFICE, LAW, COMMUNICATIONS, PUBLIC SERVICE, AND TRANSPORTATION OCCUPATIONS

1. Accountants
2. Accountants and Auditors
3. Accounting and Computing Occupations
4. Administrative Assistants (04)
5. Administrative Specialization Occupations (04)
6. Agents and Appraisers
7. Archivists
8. Bookkeepers
9. Budget and Management Analysis Occupations
10. Budget Management Analysts
11. Business Data Processing Systems Occupations
12. Cashiers
13. Clerical and Office Supervisors
14. Clerk-Typists
15. Communications Systems Clerks and Operators
16. Computer and Console Operators
17. Correspondence Clerks
18. Data-Methods and Systems-Procedures Analysts
19. Duplicating Machine Operators
20. Executive Secretaries
21. Financial Institution Occupations
22. Flight Attendants
23. Flight Operations
24. Government Service
25. Hotel Clerks
26. Information Clerks
27. Insurance Clerks
28. Interviewing and Personnel Occupations
29. Law Clerks
30. Legal Secretaries
31. Library Occupations
32. Mail Clerks
33. Medical Secretaries
34. Messengers
35. Office Machine Operators
36. Personnel Clerks
37. Postal Clerks
38. Postal Service Occupations
39. Public Service Occupations
40. Receptionists
41. Secretaries
42. Shipping and Receiving Clerks
43. Stenographers
44. Stock Clerks
45. Telephone Operators
46. Ticket Agents
47. Traffic Occupations
48. Transportation Occupations
49. Typists
50. Word Processing Occupations

15 MANUFACTURING, MECHANICAL, CONSTRUCTION, AND REPAIR OCCUPATIONS

1. Air Conditioning
2. Aircraft Mechanics
3. Aircraft Mechanics Apprentice
4. Aircraft Mechanics Helper
5. Aircraft Powerplant Mechanics
6. Aircraft Structural Mechanics
7. Aircraft Technician
8. Aircraft, Other
9. Aircraft-Related Occupations
10. Appliance Repair
11. Architectural Drafting
12. Architectural Engineering
13. Architecture
14. Artificial Breeding
15. Audio-Visual Communications
16. Automotive Body Repair
17. Automotive Mechanics
18. Automotive Mechanics Apprentice
19. Automotive Mechanics Helper
20. Automotive Parts Specialist
21. Automotive Service
22. Automotive Technician
23. Automotive, Other
24. Avionics
25. Blueprint Reading
26. Boilermaking
27. Bricklaying
28. Building Trades
29. Cabinetmaking
30. Carpentry
31. Ceramics
32. Chemical Technology
33. Civil Engineering
34. Civil Technology
35. Commercial Art Occupations
36. Commercial Artists Occupations
37. Commercial Fishery Occupations
38. Commercial Photography Occupations
39. Commercial Pilot Training
40. Communications
41. Composition, Makeup, and Typesetting
42. Computer Programmer
43. Construction and Maintenance Trades
44. Construction Industry Managers and Officials
45. Cook/Chef (09 - 04)
46. Cooling
47. Cosmetology
48. Custodial Services
49. Dairy Technology
50. Dental Hygiene (Associate Degree) (07)
51. Designers
52. Die Sinking
53. Diesel Mechanic
54. Drafting
55. Dressmaking
56. Drycleaning
57. Dry-Wall Installation
58. Electrical Appliances
59. Electrical Engineering
60. Electrical Occupations
61. Electrical Technology
62. Electric Power Generating Plants
63. Electric Welding
64. Electricity
65. Electroencephalograph Technicians
66. Electromechanical Technology
67. Electronic Technology
68. Electronics Occupations
69. Energy Conversion
70. Engineering -- Related Technology
71. Environmental -- Control Technology (01)
72. Fabric Maintenance Services
73. Fire and Fire Safety Technology
74. Fireman Training
75. Food Processing Technology (09)
76. Food Services Supervisor (09)
77. Foremanship, Supervision and Management Development (04)
78. Forestry Technology (01)
79. Foundry
80. Gas Appliances
81. Gas Welding
82. General Continuation
83. Geology Occupations
84. Glazing
85. Graphic Arts Occupations
86. Ground Operations
87. Health-Related Technology (07)
88. Heating
89. Heavy Equipment (Construction)
90. Home Economics-Related Technology (09)
91. Home Equipment Demonstrator
92. Hospital Children's Division Assistant (07)
93. Industrial Atomic Energy
94. Industrial Electricians
95. Industrial Electronics
96. Industrial Engineering
97. Industrial Technology
98. Industrial Uses of Radioisotopes
99. Installation, Operation, and Maintenance of Reactors
100. Instrument Maintenance and Repair
101. Instrumentation Technology
102. Instruments (Other than Watches and Clocks)
103. Interior Decorating (04)
104. Interior Decorators Assistant (04)
105. Laundering
106. Law Enforcement Training
107. Leatherworking
108. Lineman
109. Lithography, Photography, and Platemaking
110. Machine and Tool Design
111. Machine Shop
112. Machine Tool Operation
113. Maintenance, Heavy Equipment
114. Manufacturing Industrial Managers and Officials
115. Marine Engineering
116. Maritime Occupations
117. Masonry
118. Mathematics (Occupations In) (04)
119. Mathematics and Physical Sciences Occupations

Wood Utilization

08 DISTRIBUTION, EDUCATION, ENTERTAINMENT, MANAGERIAL, AND BUSINESS ADMINISTRATIVE OCCUPATIONS

1. Advertising Management Occupations
2. Advertising Services
3. Apparel and Accessories
4. Anthropology Occupations
5. Athletics and Sports Occupations
6. Automotive
7. Clergymen
8. College and University Education Occupations
9. Banking Occupations
10. Distributive Education, Other
11. Drama Occupations
12. Educational Assistants and Training Specialists
13. Education of the Handicapped Occupations
14. Education Occupations, Other
15. Entertainment and Recreation Occupations
16. Finance and Credit (11)
17. Finance, Insurance, and Real Estate Managers and Officials
18. Floristry
19. Food Distribution (09)
20. Food Services (09 - 16&17)
21. General Merchandise
22. Hardware, Building Materials, Farm and Garden Supplies, and Equipment
23. History Occupations
24. Home Economists and Farm Advisors (03 - 04)
25. Home Furnishings (09)
26. Hotel and Lodging
27. Industrial Marketing
28. Insurance
29. International Trade
30. Music Occupations
31. Personal Services
32. Petroleum
33. Primary School and Kindergarten Education Occupations
34. Radio Operators
35. Railroad Conductors
36. Real Estate
37. Recreation and Tourism
38. Religion and Theology Occupations
39. Retail Trade, Other
40. Sales Distribution Management Occupations
41. Secondary School Education Occupations
42. Service Industry Managers and Officials
43. Ship Captains, Mates, Pilots, and Engineers
44. Social Sciences Occupations
45. Sociology Occupations
46. Vocational Education Occupations
47. Wholesale Trade, Other

07 HEALTH, MEDICINE, AND RELATED OCCUPATIONS

1. Central Supply Technician
2. Community Health Aid
3. Cytology (Cytotechnology)
4. Dental
5. Dental Assisting
6. Dental Hygiene (Associate Degree)
7. Dental Laboratory Technology
8. Dentists
9. Dietitians
10. Electrocardiograph Technicians
11. Electroencephalograph Technicians
12. Environmental Health (01)
13. Environmental Health Assistant (01)
14. Food Service Supervisor (09)
15. Health Occupations Education, Other (09)
16. Hematology
17. Histology
18. Home Health Aid
19. Inhalation Therapy
20. Medical Assistant (Assistant to Physician's Office)
21. Medical and Dental Technology Occupations
22. Medical Emergency Technician
23. Medical Laboratory Assisting
24. Medical Laboratory Technology
25. Medicine and Health Occupations
26. Mental Health Technician
27. Mental Health Technology
28. Mental Retardation Aid
29. Miscellaneous Health Occupations Education
30. Mortuary Science
31. Nuclear Medical Technology (16&17)
32. Nursing
33. Nursing Assistance (Aid)
34. Nursing (Associate Degree)

Budget and Management Analysis Occupations
10. Budget Management Analysis
11. Business Data Processing Systems Occupations
12. Cashiers
13. Clerical and Office Supervisors
14. Clerk-Typists
15. Communications Office Clerks and Operators
16. Computer and Console Operators
17. Control Group Clerks
18. Data Collection and Distribution Clerks
19. Duplicating Machine Operators
20. Economics Occupations
21. Executive Secretaries
22. File Clerks
23. Filing, Office Machine, and General Office Clerical Occupations
24. Freelance Artists
25. General Office Clerks
26. Information Communication Occupations
27. Inspectors and Investigators, Managerial and Public Service
28. Interpreters and Translators
29. Interviewers and Test Technicians
30. Judges
31. Key Punch and Verifying Equipment Operators
32. Lawyers
33. Librarians
34. Machine Operators - Billing, Bookkeeping, and Computing
35. Mail and Postal Clerks
36. Mail-preparing and Mail-handling Machine Operators
37. Materials Support Occupations (Transporting, Storing, and Recording)
38. Messengers and Office Boys and Girls
39. Miscellaneous Managers and Officials (04)
40. Museum Curators and Related Occupations
41. Museum, Library, and Archival Sciences Occupations
42. Occupations in Law and Jurisprudence
43. Office Managers and Chief Clerks (04)
44. Office Occupations, Other
45. Peripheral Equipment Operators
46. Personnel Assistants
47. Personnel and Training Administration Occupations (04)
48. Personnel, Training, and Related Occupations
49. Planning and Production Clerks
50. Political Science Occupations (04)
51. Programmers
52. Public Administration Managers and Officials
53. Public Relations Management Occupations
54. Purchasing Management Occupations
55. Quality Control Clerks
56. Receptionists and Information Clerks
57. Secretaries
58. Social and Welfare Work Occupations (04)
59. Stenographers
60. Stenographic, Secretarial, and Related Occupations

16 & 17 Skilled, TECHNICAL, AND ENGINEERING OCCUPATIONS

1. Aeronautical Engineering
2. Aeronautical Technology
3. Agricultural Electrification Technology (01)
4. Agricultural Engineering (01)
5. Agricultural Machinery and Equipment Technology (01)
6. Agricultural-Related Technology (01)
7. Agricultural Structures and Conveniences (01)
8. Agricultural Technology (01)
9. Agriculture, Other (01)
10. Air Conditioning
11. Aircraft Maintenance
12. Aircraft Operations
13. Airframe
14. Airplane Pilots and Navigators
15. Animal Science
16. Appliance Repair
17. Architectural Occupations
18. Architectural Technology (Building Construction)
19. Architecture and Engineering (Occupations in)
20. Art Occupations
21. Astronomy Occupations
22. Automotive Services
23. Automotive Technology
24. Aviation Occupations
25. Baker
26. Barbering
27. Biological Science Occupations
28. Blueprint Reading
29. Body and Fender
30. Bookbinding
31. Brazing and Soldering Occupations
32. Business Machine Maintenance
33. Carpentry
34. Ceramic Engineering
35. Chemical Engineering
36. Chemical Technology
37. Chemistry Occupations

Cartography, Photography, and Platemaking
Machine and Tool Design
Machine Shop
Machine Tool Operation
Maintenance, Power Equipment
Manufacturing, Industrial Managers and Officials
Marine Engineering
Marine Occupations
Masonry
Mathematics Occupations (07&16)
Mathematics and Physical Sciences Occupations
Meat Cutting
Mechanical Engineering
Mechanical Technology
Mechanics
Medical Laboratory Assisting (07)
Metal Patternmaking
Metal Trades, Combined
Metallurgical Technology
Metalwork
Metallurgy and Metallurgical Engineering
Metalworking
Meteorology Occupations
Millwork and Cabinet Making
Mining and Petroleum Engineering
Mining Industry Managers and Officials
Miscellaneous Professional, Technical, and Managerial Occupations (04 - 14)
Miscellaneous Technical Education (04)
Motor Repairman
Nuclear Engineering
Nuclear Technology
Nursing (Associate Degree) (07)
Oceanographic Technology (Physical, Biological, and Fisheries)
Office-Related Technology (14)
Operating, Power Equipment
Painters and Related Occupations
Painting and Decorating
Personal Services (09)
Petroleum Technology
Photoengraving
Photographic Laboratory and Darkroom Operation
Photographic Occupations
Physics Occupations
Plant Science
Plastering
Plastics Occupations
Plumbing and Pipefitting
Police (Law Enforcement and Correctional) Science Technology
Power Plant
Printing Press Occupations
Product Design
Production
Public Service Occupations (04 - 14)
Radio/Television
Radiography
Radiologic Technology (X-Ray)
Refrigeration
Roadway Technology
Roofing
Sanitation Technology
Scientific Data Processing (14)
Seamanship
Sheet Metal
Ship and Boat Operation and Maintenance
Shoe Manufacturing
Shoe Repair
Silk Screen and Printing
Small Engine Repair, Internal Combustion
Sound Recording, Transcribing, Reproduction Occupations
Specialization, Other
Stationary Energy Source Occupations
Stock and Inventory Clerks (14)
Structural Technology
Surveyors
Supervisory and Administrative Management Occupations (04)
Systems Analysis (14)
Systems Analyst Technology
Tailoring (09)
Teacher's Assistant at the Preprimary Level (04)
Tellers (14)
Textile Production and Fabrication (09)
Tool and Die Making
Trade and Industrial Occupations, Other
Traffic, Rate and Transportation Clerks
Transportation
Transportation, Communication, and Utilities Industry Managers and Officials
Typing and Related Occupations (14)
Typists (14)
Upholstering
Ventilating (Filtering and Humidification)
Waiter/Waitress
Watchmaking and Repair
Welding (Combination)
Welding and Cutting
Wholesale and Retail Trade Managers and Officials (04 - 14)
Window Display (04)
Woodworking
Writers and Editors, Motion Picture, Radio, and Television (04)

DISCIPLINE INTRODUCTION

SOCIAL STUDIES

A number of schools in Minnesota are presently using the Minnesota Project Social Studies curriculum. Although the materials developed for the project are centered on the study of sociology, political science, and economics, which should be readily adaptable to emphasize career development, little has been done to suggest, specifically, how this might be done.

The examples that are presented here are an attempt to develop a model which can bridge that gap and put into the hands of the social studies teachers a useable structure and philosophy emphasizing career development.

Although these materials are developed with Project Social Studies in mind, this in no way limits their use to only that curriculum. They are equally adaptable to other approaches in the social studies program.

Suggested Skill Objectives

- Is able to gain information by listening and observing
- Clarifies his purpose or theme
- Is able to empathize with others, seeing things through their eyes, whether he accepts their viewpoint or sympathizes with them or not
- Helps create and preserve an atmosphere in which all members of a group feel secure and anxious to participate
- Checks, refines, and eliminates hypotheses, working out new ones where necessary
- Acquires information through reading:
  - Reads for details which support or contradict generalizations and main ideas
  - Is able to interpret tables, graphs, and charts

Techniques

- Role playing
- Similations
- Discussion
- Reading for information
- Films and filmstrips
- Slides
- Observations
- Community resource people

SEVENTH GRADE SOCIAL STUDIES

OVERVIEW

Project Social Studies for seventh grade explores the basic needs of:

- Man
  - Physical
  - Psychological
- Family
  - Physical
  - Psychological
- Community (institutions)
  - Physical
  - Psychological

These are to include, in general:

- Communication
- Humanization
- Social values and attitudes
- Environment
- Heritage
- Culture

Specific teaching concepts to be emphasized in the unit presented are:

- Role
- Identification
- Association
- Interdependence
- Services
- Self
- Socialization

Career Objectives

Helping the student view self as a worthy person

Helping the student experience success

Helping the student appreciate his own potentials and interests

Helping the student develop a positive self-image

Specific Concepts

Role
Identification
Association
Interdependence
Services
Self
Socialization (values and attitudes)

The student, having previously studied the roles of the individual and the individual in the family (including family interactions), now attempts to show the relationship between the individual and his family, other families, and the community in general.

Materials Needed

Classroom sets of telephone directories representing a large metropolitan area and a rural area

Dictionary of Occupational Titles (D.O.T.)

Career Opportunities for Technicians and Specialists

Occupations for You (Alexandria, Virginia, 1968 OT 006188)

Possible Activities

I. In this activity the students will explore the make-up of a community through occupational possibilities. The teacher will initiate the discussion by asking "What occupation would you like to have in a community? How is your occupational choice dependent upon your admiration for a person already in that occupation?" Discuss.

Have the students develop a role-playing scene in which their occupation is portrayed. Upon completion of this activity, have the students read about their occupations and determine if their perception is consistent

with reality. Discuss the application, for the students, of this activity to the world of work.

II. In this activity the students will determine the differences and similarities between job types in rural and urban communities. Divide the class into groups of three to five people; their task is to look through the yellow pages of two telephone directories. One is of a large city; the other is from a small rural town. Through introductory discussion, point out the uses of the directories. Have the students give examples of how the telephone directory has been useful to them. Be sure to point out that services as well as goods are available through the yellow pages. Let each group page through the books. Have them note the size of the two books. Have them hypothesize why there is such a size difference. Let the students compare some of the goods and services available in each book. Discuss the wants and needs of each area. Discuss the occupations available in each area.

Questions for Class Discussion

Which directory offers more?

Why does a city directory have more goods and services represented?

Are there any goods or services found in one directory which was not found in the other?

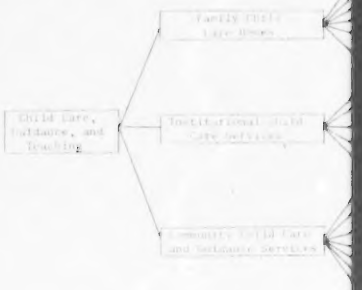
If you live in a small town, what might be the most important area of interest to you?

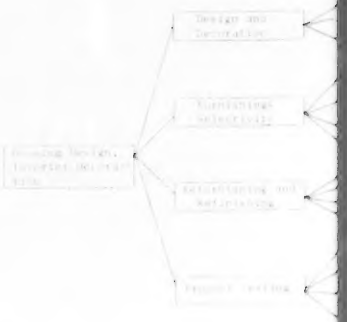
If you live in a large city, what might be the most important area of interest to you?

From what has been seen in the yellow pages, where would you like to live? Explain.

Clust

CONSUMER AND HOMEMAKIN

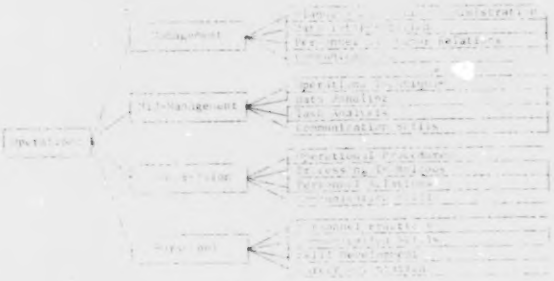


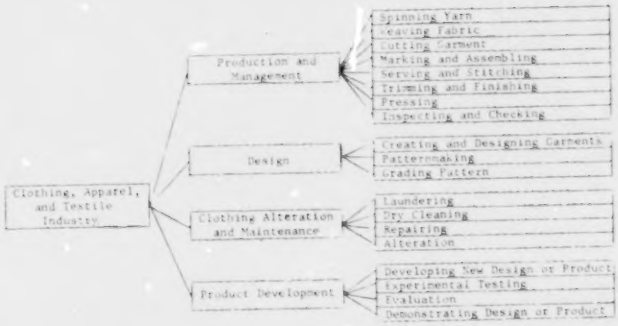


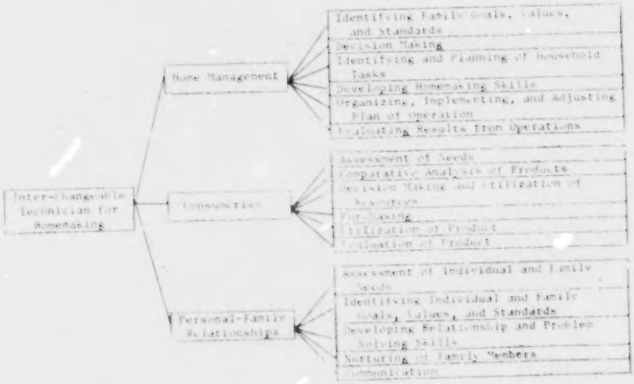
Cluster for

HOMEMAKING -- RELATED OCCUPATIONS

Family Child Care Homes
Nurturing of Individual Child
Caring for Physical Needs of Child
Protecting the Child
Guiding and Teaching Child
Compliance with Regulations
Adjusting Household to Meeting Needs of Child
Institutional Child Care Services
Providing Physical Care of Children
Nurturing and Guidance of Children
Planning and Adapting Programs to Children with Varying Needs
Teaching of Children
Supervision of Children
Community Child Care and Outdoor Services
Caring for Physical Needs of Children
Planning and Scheduling for Children's Activities
Directing Children's Activities
Supervision of Children
Guiding and Nurturing of Children
Housekeeping and Maintenance
Operation, Management, and Supervision

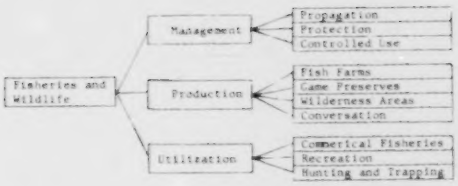


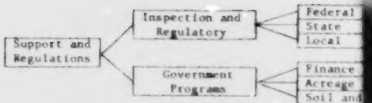


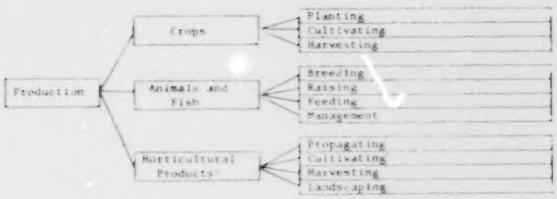


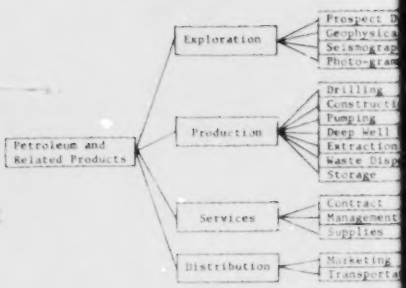
Cluster

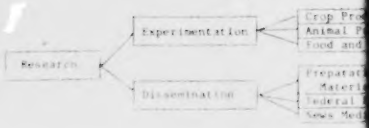
AGRI-BUSINESS AND NA











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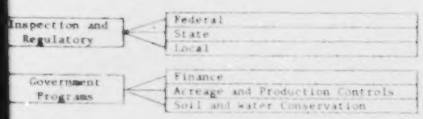
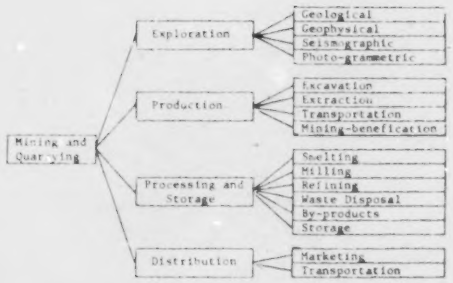
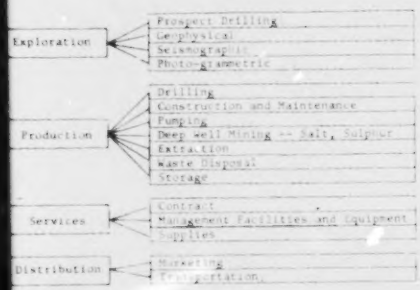
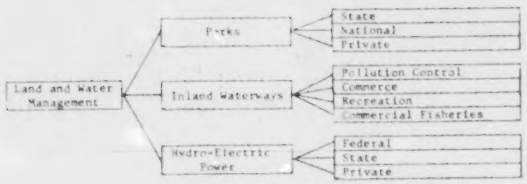
Cluster for

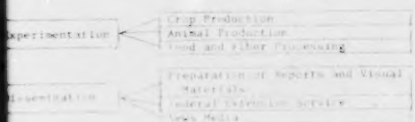
SS AND NATURAL RESOURCES

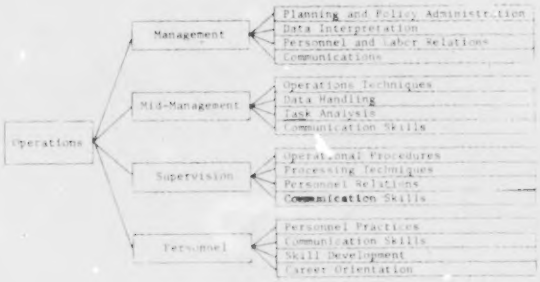


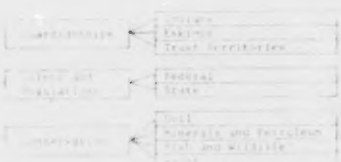












EIGHTH GRADE SOCIAL STUDIES

OVERVIEW

Project Social Studies for eighth grade explores our political system:

Persuasive tactics in a democracy
Structure of United States government
Individual rights in a democracy

These are to include, in general:

Propaganda techniques
Executive unit
Legislative unit
    Due process of law
Judicial unit
    How a bill becomes a law

Specific teaching concepts to be emphasized in the unit presented are:

Values
Conflicts
Civil liberties
Decision-making process
Discrimination

Career Objectives

Helping the student expand his knowledge of career-vocational information and identify career opportunities within a community

Helping the student assess the extent to which technological change may affect the employment opportunities and task requirements of a preferred occupation

Helping the student become aware of the variety of the opportunities within each job cluster

Specific Concepts

Values
Conflicts
Civil liberties
Decision-making process
Discrimination

Materials Needed

Community resource people

Local publications

Television commercials that are "outdated" from television stations or advertising agencies

Job descriptions for courtroom personnel and people connected with court proceedings. (Career Planning Guide -- available through the computer system with Honeywell or Dr. Cliff Helling, District 281)

Book on courtroom procedure

Possible Activities

I. Basic premise for this activity: "Purpose of advertising is to sell what might not be bought."

A. The following example of a study sheet gives the basic information needed for the study of persuasion and propaganda.

"HE WHO WANTS TO PERSUADE SHOULD PUT HIS TRUST NOT IN THE RIGHT ARGUMENT, BUT IN THE RIGHT WORD....GIVE ME THE RIGHT WORD AND THE RIGHT ACCENT AND I WILL MOVE THE WORLD." Joseph Conrad

1. Definition of persuasion: It is the process of securing acceptance of an idea or an action by connecting it favorably

with the listeners' (or readers') attitudes, beliefs, and desires. The emphasis is on making the listener want to do what the evidence indicates he should do. Persuasive speeches are used to secure acceptance of conclusion reached through study and investigation.

We use it to designate our attempts to get others to do what we want them to do. In a general sense, a large part of written and oral communication might be called persuasion. Persuasion and propaganda are practically identical. DISTINCTION: Propaganda is dispersed or concentrated; when concentrated upon a few persons it is persuasion.

2. The basis of persuasion:
   We tend to believe what we want to believe.
   We tend to believe, and to do, as we are told.
   We tend to act in accordance with our dominant attitudes.
   We tend to respond to the emotional connotations of words.
   We tend to accept ideas from those we like.
   We tend to conform.
   We tend, when persuaded, to act immediately.
   We tend to regard our action as logical.

3. The process of persuasion:

   Four factors combine to determine the success of a persuasive speech:

   1. The speakers' prestige.
   2. The listeners' attitudes towards his proposal.
   3. The skill used in constructing the speech.
   4. The circumstances under which it was delivered.

B. The following is a group of possible activities with a variety of ability levels indicated:

1. Group a selection of advertisements according to the age of the people used in the ad (like young, middle-aged, or older). After studying many advertisements, what age group is used the most often, and why is this age group used more than others? (Good for slow-learners)

2. Choose a certain product (like gasoline, detergents, cigarettes, shampoo, cake mixes, automobiles, pre-packaged foods, clothing, sports equipment, televisions, appliances) and work up a presentation showing all the different techniques and devices used to try to sell these products. How do they try to get your interest? Show the different approaches that can be used to sell basically the same product.

3. Make a list of words, present them to the class; have them decide what products they could be used to sell and why? Notice the wide diversity of products that can be sold using the same group of words.

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4. Suppose you are a Martian archaeologist of the year 4,000 A.D. The only evidence about life in the 20th Century is a can of TV commercials found in the ruins. The can contains commercials about soap, toothpaste, cigarettes, coke, aspirin, gasoline, razor blades, nylons, and Pepsi. Based on the information found in these advertisements, what report would you make on the extinct civilization of the Americans of the 20th Century? (Excellent for good students)

5. Find a food product that is marketed in a particular container. Study the container, front, back and side panels; and then redesign the container to be more attractive and a better salesman for the product. Present this to the class, and be the products' best salesman.

At the conclusion of this lesson, have the students decide which jobs would be involved in the process of each activity.

1. From the activities that you have done, which jobs would be appealing to you? Why?

2. Which jobs from the activity did not appeal to you? Why?

3. Did any of the jobs you explored seem unnecessary?

Suggestion: The nature of this unit lends itself to cooperative interaction between speech and social studies.

II. Courtroom observation and simulation activity:

A. Preview Study: In order to help assure a successful observation and simulation, a thorough introductory study of courtroom procedures is mandatory.

B. Courtroom Observation: This segment of the activity will consist of a field trip visit to a courtroom in action.

C. Courtroom Simulation: Utilizing the Preview Study and Courtroom Observation, this part of the activity will be initiated with a general discussion and listing on the blackboard or overhead of the occupational spectrum related to the courtroom.

In order to amplify the experience gained in the Courtroom Observation, the viewing of a television courtroom show will now be included. The list that began in general discussion will be further amended and refined, then retained for future reference (when students are satisfied that the list is complete).

At this point the class will be divided into groups of four or five, and using the lists previously developed, write job descriptions for each position. Then, utilizing the IMC and Career Planning (EDINET)

materials as well as direct communication with appropriate community resource people, students will make final revisions in the job title/descriptions. Arrangements will now be made for the duplication and distribution of these materials to all participants.

With the job title/description materials, the student will then select an occupation in which he is interested, and feels qualified. In making application for his selected job, the student will supply the following information:

Name
Occupation applied for
Description of job and its duties
His qualifications for the job
A statement explaining why he is making application for this particular job

Upon completion of the application, the teacher or a board of students will review the applications and award jobs to all participants. It will be at this time that the students will either read a court case transcript or experience through a play, a criminal action which will simulate the judicial process. This simulation will allow the student to contrast his performance of the duties of the selected occupation with the ideal performance as written in the original job descriptions.

Questions for Class Discussion

What type of occupation is the most important to the legal system?

Was there any occupation portrayed which is not really needed for justice to prevail?

What disappointments did you experience in the performance of your duties?

Did your job description accurately portray what you actually did in the simulation?

EDUCATIONAL OPPORTUNITIES FOR CAREER PREPARATION

(This material is needed for Step C under the directions on other side.)

COLLEGES

CODE	NAME
C1	Anoka Ramsey State Junior College
C2	Augsburg College
C3	Austin State Junior College
C4	Bemidji State College
C5	Bethany Lutheran College
C6	Bethel College
C7	Brainerd State Junior College
C8	Carleton College
C9	College of Saint Benedict
C10	College of St. Catherine
C11	College of St. Scholastica
C12	College of St. Theresa
C13	College of St. Thomas
C14	Concordia College (Moorhead)
C15	Concordia College (St. Paul)
C16	Corbett Junior College
C17	Dr. Martin Luther College
C18	Fergus Falls State Junior College
C19	Golden Valley Lutheran College
C20	Gustavus Adolphus College
C21	Hamline University
C22	Hibbing State Junior College
C23	Inver Hills State Junior College
C24	Itasca State Junior College
C25	Lakewood State Junior College
C26	Leech Lake on Lake Chapeau
C27	Macalester College
C28	Mankato State College
C29	Mesabi State Junior College
C30	Metropolitan State Junior College
C31	Minneapolis School of Art
C32	Minnesota Bible College
C33	Moorhead State College
C34	Normandale State Junior College
C35	North Central Bible College
C36	North Hennepin State Junior College
C37	Northland State Junior College
C38	Rainy River State Junior College
C39	Rochester State Junior College
C40	St. Cloud State College
C41	Saint John's University
C42	Saint Mary's College
C43	St. Mary's Junior College
C44	Saint Olaf College
C45	St. Paul Bible College
C46	Southwest Minnesota State College
C47	University of Minnesota
C48	University of Minnesota, Duluth
C49	University of Minnesota, Morris
C50	University of Minnesota Technical College -- Crookston
C51	University of Minnesota Technical College -- Waseca
C52	Vermilion State Junior College
C53	Willmar State Junior College
C54	Winona State College
C55	Worthington State Junior College

PRIVATE SCHOOLS

CODE	NAME
P1	Academy for Home Study, Inc.
P2	Academy of Accountancy
P3	Advance Trades School, Inc.
P4	Alexander Hamilton Institute, Inc.
P5	American Automation Training Centers, Inc.
P6	American Motel School, Inc.
P7	American School
P8	Art Instruction Schools
P85	Universal Airline Personnel School, Inc.
P86	Universal Heavy Construction Schools, Inc.
P87	Universal Hotel Schools, Inc.
P88	Universal Training Service, Inc.
P89	Victor Business School
P90	Washington School of Art
P91	Wayne School, Inc.
P92	Weaver Airline Personnel School
P93	William Mitchell

APPRENTICESHIP TRAINING

CODE	NAME
A1	Artist, Commercial
A2	Artist, Lithocolor
A3	Artist, Litho Lay-out and Stripper
A4	Asbestos Worker
A5	Baker
A6	Beveler, Glass Silverer
A7	Blacksmith
A8	Boat Builder, Wood
A9	Boilermaker
A10	Bookbinder
A11	Bracemaker
A12	Bricklayer
A13	Buttermaker
A14	Cabinetmaker
A15	Cameraman, Litho
A16	Cameraman, Motion Picture
A17	Carman (R.R.)
A18	Carpenter
A19	Carpenter, Coach
A20	Cement Mason
A21	Cheesemaker
A22	Color Matcher and Ink Maker
A23	Compositor
A24	Cook
A25	Coremaker
A26	Cutter and Auto Glazier, Safety Glass
A27	Cutter, Cloth
A28	Cutter, Die Envelope
A29	Cutter, Fur
A30	Cutter, Glass
A31	Cutter, Granite
A32	Cutter, Meat
A33	Cutter, Paperstock
A34	Cutter, Warehouse Class
A35	Die Sinker
A36	Draftsman, Architectural
A37	Draftsman, Electrical
A38	Draftsman, Engineering
A39	Draftsman, Mechanical
A40	Draftsman, Ornamental Iron
A41	Electrical Shopman
A42	Electrical Wireman
A43	Electrician, Maintenance
A44	Electrician, Powerhouse
A45	Electrician, (R.R.)
A46	Electroplate
A47	Electroplate, Finisher
A48	Electroplate, Molder
A49	Engineer, Operating (Diesel)
A50	Engineer, Operating (Steam)
A51	Engraver, Hand
A52	Engraver, Steel Die
A53	Feeder
A54	Finisher, Optical
A55	Finisher, Watchglass
A56	Fitter, Sprinkler
A57	Floor Coverer
A58	Furniture Finisher
A136	Pipefitter, (Gas and Oil)
A137	Pipefitter, Maintenance
A138	Pipefitter, (Refrigerator)
A139	Pipefitter, (Steam)
A140	Plasterer
A141	Plate Maker, Class "B"
A142	Plate Maker, Litho
A143	Plate Maker, Litho Offset
A144	Plate Maker, Rubber
A145	Plate Preparer, Litho Offset
A146	Plumber
A147	Press Assistant, Litho Offset
A148	Press Feeder, Litho Offset
A149	Press Feeder, Platen
A150	Press Feeder, Assistant, Cylinder
A151	Pressman, Combination Cylinder and Platen
A152	Pressman, Class "A"
A153	Pressman, Class "B"
A154	Pressman, Cylinder
A155	Pressman, Gordon
A156	Pressman, Harris
A157	Pressman, Kosl
A158	Pressman, Litho Offset
A159	Pressman, Mehle
A160	Pressman, Platen
A161	Pressman, Rotary
A162	Pressman, Rotoengraver
A163	Pressman, Steel and Die
A164	Pressman, Web
A165	Printer, Class "C"
A166	Printer, Job Shop
A167	Printer, Photoengraver
A168	Rule Maker, Steel Die
A169	Serviceman, Fuel Injection
A170	Serviceman, Scale
A171	Serviceman, Shoe
A172	Set-up Man, International Line
A173	Sheetmetal Maintenance
A174	Sheetmetal, R.R.
A175	Sheetmetal Worker
A176	Shopman, Architectural and Ornamental Iron
A177	Sign Hanger
A178	Silverer and Beveler, Glass
A179	Stereotyper
A180	Stripper, Litho
A181	Stripper, Litho Color
A182	Stripper, Litho Lay-out Artist
A183	Stripper and Printer, Photoengraver
A184	Taper, Dry Wall
A185	Technician, Dental
A186	Technician, Electronic Control
A187	Technician, Radio and T.V.
A188	Terrazzo Worker
A189	Tile Setter
A190	Tool and Die Maker
A191	Treater, Heat
A192	Tube Bender, Neon
A193	Upholsterer
A194	Upholsterer, Automotive
A195	Watchmaker

For such services or more specific information, [illegible] may be furnished by any of the following:

Director
Division of Apprenticeship
110 State Office Building
St. Paul, MN 55101

Bureau of Apprenticeship and Training
U.S. Department of Labor
Room 134, Federal Building
316 Robert Street
St. Paul, MN 55101

Manpower Services, Local Offices

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C53	Willmar State Junior College
C54	Winona State College
C55	Worthington State Junior College

PRIVATE SCHOOLS

CODE	NAME
P1	Academy for Home Study, Inc.
P2	Academy of Accountancy
P3	Advance Trades School, Inc.
P4	Alexander Hamilton Institute, Inc.
P5	American Automation Training Centers, Inc.
P6	American Motel School, Inc.
P7	American School
P8	Art Instruction Schools
P9	Atlantic School
P10	Atlantic School of California
P11	Bell and Howell Schools
P12	Brown Institute
P13	Capitol Radio Engineering Institute, Inc.
P14	Career Academy, Inc.
P15	Central Technical Institute
P16	Cleveland Institute of Electronics
P17	Columbia School of Broadcasting
P18	Commercial Business School, Inc.
P19	Commercial Trades Institute
P20	Control Data Institute
P21	Dale Carnegie Course: Sponsored by Morris L. Norman and Associates
P22	Dale Carnegie: Sponsored by Sam Carlson and Associates
P23	DeVry Institute of Technology
P24	Diesel Truck Driver Training School, Inc.
P25	Diversified Education, Inc.
P26	Duluth Business University
P27	Elba Systems Corporation
P28	Electronic Computer Programming Institute
P29	Estelle Compton Models Institute
P30	Famous Artists School
P31	Famous Photographers School
P32	Famous Schools
P33	Famous Writers School
P34	Foley Saw and Tool Maintenance School
P35	Form 1040 Tax School
P36	Gale Institute
P37	Globe College of Business, Inc.
P38	H & R Block Inc. Income Tax School
P39	Hanson Mechanical Trade School
P40	Hartford Airline Personnel School
P41	Humboldt Institute, Inc.
P42	IBM Data Processing Educat. n Center
P43	Institute of Business and Com, ter Education
P44	Insurance Adjusters School
P45	International Accountants Society, Inc.
P46	International Correspondence Schools
P47	Interstate Business College
P48	Jetma Technical Institute
P49	LaSalle Extension University
P50	Lewis Hotel-Motel Schools
P51	Lincoln Extension Institute, Inc.
P52	McConnell Airline School, Inc.
P53	Mankato Commercial College
P54	Medical Institute of Minnesota
P55	Minneapolis Business College
P56	Minneapolis Drafting School
P57	Minnesota Institute of Medical and Dental Assistants
P58	Minnesota School of Bartending, Inc.
P59	Minnesota School of Business
P60	Motel Management Institute
P61	Motel Managers Training Corporation
P62	National Institute of Meat Packing
P63	National Reading Institute of Minnesota, Inc.
P64	Nettleton Commercial College
P65	Northern Technical School of Business
P66	Northwest Schools
P67	Northwest Technical Institute
P68	Northwestern Electronics Institute
P69	Palmer Writers School, Inc.
P70	Patricia Stevens Career and Finishing School
P71	Personal Dynamics, Inc.
P72	Piccadilly, Ltd.
P73	Professional Business Institute
P74	Rasmussen School of Business
P75	Reading Dynamics of Minnesota
P76	Sawyer School of Business
P77	Speed Read Plus
P78	St. Cloud Business College
P79	Sales Training of Twin Cities, Inc.
P80	Star Brake School
P81	State Bar Review Course
P82	United Electronics Institute
P83	United Systems, Inc.
P84	United Technical Institute

A40	Draftsman, Ornamental (Tin)
A41	Electrical Shopman
A42	Electrical Wireman
A43	Electrician, Maintenance
A44	Electrician, Powerhouse
A45	Electrician, (R.R.)
A46	Electroplate
A47	Electroplate, Finisher
A48	Electroplate, Molder
A49	Engineer, Operating (Diesel)
A50	Engineer, Operating (Steam)
A51	Engraver, Hand
A52	Engraver, Steel Die
A53	Feeder
A54	Finisher, Optical
A55	Finisher, Watchglass
A56	Fitter, Sprinkler
A57	Floor Coverer
A58	Furniture Finisher
A59	Furniture Maker
A60	Furrier
A61	Glazier
A62	Glazier, Safety Glasscutter and Auto
A63	Glazier, Stained Glass
A64	Grainer, Litho
A65	Granite Polisher
A66	Granite Sand Blastman
A67	Ink Maker, Color Matcher
A68	Iron Worker
A69	Jeweler
A70	Lab Assistant, Litho Chemical
A71	Lab Technician, Optical
A72	Lather
A73	Layout Man, Structural
A74	Lens Grinder, Optical
A75	Lineman, Combination Telephone
A76	Lineman, Electrical Power
A77	Lithographer, Class "C"
A78	Lock Smith
A79	Machine Adjuster, Envelope
A80	Machinist
A81	Machinist, Automotive
A82	Machinist, Composing Room
A83	Machinist, Linn Type
A84	Machinist, Maintenance
A85	Machinist, Printing Press
A86	Machinist, (R.R.)
A87	Machinist, Tool Room
A88	Machine Operator, Automatic Stitching and Tipping
A89	Machine Operator, Folding
A90	Machine Operator, Gathering
A91	Machine Operator, Glass
A92	Machine Operator, Ruling
A93	Mailer
A94	Marble Setter
A95	Marking Devices Maker, Rubber and Metal
A96	Mechanic, Aircraft and Engine
A97	Mechanic, Auto Body and Fender
A98	Mechanic, Automobile
A99	Mechanic, Business Machine
A100	Mechanic, Farm Tractor and Equipment
A101	Mechanic, Heavy Equipment
A102	Mechanic, Highway Equipment
A103	Mechanic, Line Casting Machine
A104	Mechanic, Motor Truck and Tractor
A105	Mechanic, Plant Maintenance
A106	Mechanic, Sewing Machine
A107	Metal-Smith, Aircraft
A108	Metal Spinner
A109	Meter Tester
A110	Miller
A111	Millwright
A112	Millwright, Maintenance
A113	Moulder
A114	Monument Maker
A115	Offset Forms Assistant, Web
A116	Opaquer, Litho
A117	Operating, Litho Perfecting
A118	Operating, Litho Photo Contact Room
A119	Operator, Litho Offset Davidson
A120	Painter
A121	Painter, Automobile
A122	Painter, Coach
A123	Painter, Sign and Pictorial
A124	Pattern Maker
A125	Photoengraver, Copper Etcher
A126	Photoengraver, Finisher
A127	Photoengraver, Layout Man
A128	Photoengraver, Premier
A129	Photoengraver, Rotogravuer
A130	Photoengraver, Router and Blocker
A131	Photoengraver, Zinc Etcher
A132	Photographer, (Commercial)
A133	Photographer, Litho Half-Tone Line
A134	Photographer, Photoengraver
A135	Photographer, (Portrait)
A193	Upholsterer
A194	Upholsterer, Automotive
A195	Watchmaker

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Room 134, Federal Building
316 Robert Street
St. Paul, MN 55101

Manpower Services, Local Offices

Apprenticeship Information Center
Youth Opportunity Center Offices: St. Paul, Minneapolis, Duluth

HOSPITALS

CODE	NAME
H1	Abbott Hospital School of Nursing
H2	Northwestern Hospital School of Nursing
H3	Arthur B. Ancker Memorial School of Nursing
H4	Fairview Hospital School of Nursing
H5	Hennepin County General Hospital School of Nursing
H6	Lutheran Deaconess Hospital School of Nursing
H7	Methodist Hospital School of Nursing
H8	Naeve Hospital School of Nursing
H9	St. Barnabas Hospital School of Nursing
H10	St. Luke's Hospital School of Nursing
H11	The Swedish Hospital School of Nursing
H12	Bethesda Lutheran Hospital School of Practical Nursing
H13	Miller Hospital Vocational School of Practical Nursing
H14	St. Francis Hospital School of Practical Nursing

VOCATIONAL-TECHNICAL SCHOOLS

CODE	NAME
V1	Albert Lea Area Vocational-Technical School
V2	Alexandria Area Vocational-Technical School
V3	Anoka Area Vocational-Technical School
V4	Austin Area Vocational-Technical School
V5	Bemidji Area Vocational-Technical School
V6	Brainerd Area Vocational-Technical School
V7	Canby Area Vocational-Technical School
V8	Dakota County Area Vocational-Technical School
V9	Detroit Lakes Area Vocational-Technical School
V10	Duluth Area Vocational-Technical School
V11	Eveleth Area Vocational-Technical School
V12	Faribault Area Vocational-Technical School
V13	Granite Falls Area Vocational-Technical School
V14	Hibbing Area Vocational-Technical School
V15	Hutchinson Area Vocational-Technical School
V16	Jackson Area Vocational-Technical School
V17	Mankato Area Vocational-Technical School
V18	Minneapolis Area Vocational-Technical School
V19	Moorhead Area Vocational-Technical School
V20	Suburban Hennepin County Vocational-Technical School
V21	Pine City Area Vocational-Technical School
V22	Pipestone Area Vocational-Technical School
V23	Ramsey-Washington County Area Vo-Tech Center 916
V24	Rochester Area Vocational-Technical School
V25	St. Cloud Area Vocational-Technical School
V26	St. Paul Area Vocational-Technical School
V27	Stanley Area Vocational-Technical School
V28	Thief River Falls Area Vocational-Technical School
V29	Wadena Area Vocational-Technical School
V30	Willmar Area Vocational-Technical School
V31	Winona Area Vocational-Technical School

OTHER

CODE	NAME
01	Mounds-Midway School of Nursing
02	Crookston School of Practical Nursing
03	Fergus Falls Practical Nursing Program
04	Grand Rapids Practical Nursing Program
05	Hastings Practical Nursing Program
06	Meeker County School of Practical Nursing
07	New Ulm School of Practical Nursing
08	Red Wing School of Practical Nursing
09	Rochester School of Practical Nursing
010	Job Entry Skills Do Not Require Training

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CAREER PLANNING GUIDE

Authored: Dr. Cliff C. Golling, Director of Vocational Education, 281 Robbinsdale Area Schools, Minneapolis, Minnesota
Mr. Rodney W. Hale, Director of Vocational Education, 833 Cottage Grove Schools, Minneapolis, Minnesota

Produced By Honeywell Inc., Minneapolis, Minnesota
A comprehensive career selection program which complements this guide is available through Honeywell EDINET.

DIRECTIONS

This is a list of about 500 careers or career areas organized into six general categories. It includes the entire range of jobs available in the United States. Some of these 500 careers have several additional jobs that are related to the ones listed. This list represents careers requiring all levels of education and training. They are listed in the general categories by skill emphasis so be sure to read over all titles in each of the categories. The numbers in parentheses following a career refer to other related career areas that should also be reviewed.

Read the directions carefully. This information will help you in your career planning by providing you with: (1) the breakdown of these occupations into related jobs, (2) sources of information for further study, (3) sources of educational and training requirements and post-high school institutions offering courses of study in these areas.

A. Read over all of the titles.
B. Select those occupations which interest you.
C. Bring your request to the counseling office and you will receive printed information relating to areas 1, 2, and 3 above.

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01 AGRICULTURE, FISHING, FORESTRY, ENVIRONMENT AND ECOLOGY OCCUPATIONS

1. Agriculture, Forestry, and Fishing Industr. Managers and Officials (16617)
2. Agricultural Chemicals (16617)
3. Agricultural Construction and Maintenance (16617)
4. Agricultural Electrification (16617)
5. Agricultural Mechanics (16617)
6. Agricultural Mechanics Skills (16617)
7. Agricultural Power and Machinery (16617)
8. Agricultural Production (16617)
9. Agricultural Products (Processing, Inspection, and Marketing) (16617)
10. Agricultural Resources (Conservation, Utilization, and Services) (16617)
11. Agricultural Science Occupations (16617)
12. Agricultural Structures and Conveniences (16617)
13. Agricultural Supplies/Services (16617)
14. Agriculture, Other (16617)
15. Air
16. Animal Science
17. Arboriculture
18. Dairy Products
19. Farm Business Management (06)
20. Farm Mechanics (16617)
21. Feeds
22. Fertilizers (Plant Food)
23. Fish (Including Farms and Hatcheries)
24. Floriculture
25. Food Products
26. Forestry Protection
27. Forestry, Other
28. Horticultural Production, Processing, Management, Marketing, and Services
29. Greenhouse Operations and Management
30. Landscaping
31. Logging (Harvesting and Transporting)
32. Nursery Products
33. Nursery Operation and Management
34. Ornamental Horticulture (Production, Processing, Marketing, and Services)
35. Plant Science
36. Poultry
37. Seeds
38. Soil
39. Soil Conservation
40. Special Products
41. Turf Management
42. Water
43. Water Management
44. Wildlife Conservation (Game Farms and Hunting Areas)
45. Wood Utilization

04 DISTRIBUTION, EDUCATION, ENTERTAINMENT, MANAGERIAL, AND BUSINESS ADMINISTRATIVE OCCUPATIONS

1. Advertising Management Occupations
2. Advertising Services
3. Apparel and Accessories

37. Obstetrical Technician (16617)
38. Occupational Therapy
39. Ophthalmic
40. Ophthalmic Dispensing
41. Optometrist Assistant
42. Orthopedic Assisting
43. Orthotics
44. Orthoptics
45. Osteopaths
46. Pharmacists
47. Physical Therapy
48. Physicians and Surgeons
49. Prosthetics
50. Psychiatric Aid
51. Psychology Occupations
52. Radiation Therapy
53. Radiological Health Technician (16617)
54. Radiologic Technology (X-Ray)
55. Radiologic, Other
56. Rehabilitation
57. Sanitation Assistant
58. School Health Aid
59. Surgical Technician (Operating Room Technician) (16617)
60. Veterinarians

09 HOME ECONOMICS AND PERSONAL HOME SERVICE OCCUPATIONS

1. Care and Guidance of Children
2. Child Development
3. Clothing Management, Production, and Services
4. Clothing and Textiles
5. Comprehensive Homemaking or Home Economics
6. Consumer Education
7. Family Health (07)
8. Family Relations
9. Food and Nutrition (04 - 16617)
10. Food Management, Production, and Services (04 - 16617)
11. Home Furnishings, Equipment, and Services
12. Home Management
13. Homemaking, Other
14. Homemaking: Preparation for Personal, Home, and Family Living
15. Housing and Home Furnishings
16. Institutional and Home Management and Supporting Services

14 CLERICAL, BUSINESS, OFFICE, LAW, COMMUNICATIONS, PUBLIC SERVICE, AND TRANSPORTATION OCCUPATIONS

1. Accountants
2. Accountants and Auditors
3. Accounting and Computing Occupations
4. Administrative Assistants (04)
5. Administrative Specialization Occupations (06)
6. Agents and Appraisers
7. Archivists
8. Bookkeepers
9. Budget and Management Analysis Occupations
10. Budget Management Analysts
11. Business Data Processing Systems Occupations
12. Cashiers
13. Clerical and Office Supervisors
14. Clerk-Typists
15. Communications Systems Clerks and Operators
16. Computer and Console Operators
17. Correspondence Clerks
18. Data-Methods and Systems-Procedures Analysts
19. Duplicating Machine Operators
20. Economics Occupations

40. Commercial Art Occupations
41. Commercial Artists Occupations
42. Commercial Fishery Occupations
43. Commercial Photography Occupations
44. Commercial Pilot Training
45. Communications
46. Composition, Makeup, and Typesetting
47. Computer Programmer
48. Construction and Maintenance Trades
49. Construction Industry Managers and Officials
50. Cook/Chef (09 - 04)
51. Cooling
52. Cosmetology
53. Custodial Services
54. Dairy Technology
55. Dental Hygiene (Associate Degree) (07)
56. Designers
57. Die Sinking
58. Diesel Mechanic
59. Drafting
60. Dressmaking
61. Dryeleaning
62. Dry-Wall Installation
63. Electrical Appliances
64. Electrical Engineering
65. Electrical Occupations
66. Electrical Technology
67. Electric Power Generating Plants
68. Electric Welding
69. Electricity
70. Electroencephalograph Technicians
71. Electromechanical Technology
72. Electronic Technology
73. Electronics Occupations
74. Energy Conversion
75. Engineering -- Related Technology
76. Environmental -- Control Technology (01)
77. Fabric Maintenance Services
78. Fire and Fire Safety Technology
79. Fireman Training
80. Food Processing Technology (09)
81. Food Services Supervisor (09)
82. Foremanship, Supervision and Management Development (06)
83. Forestry Technology (01)
84. Foundry
85. Gas Appliances
86. Gas Welding
87. General Continuation
88. Geology Occupations
89. Glazing
90. Graphic Arts Occupations
91. Ground Operations
92. Health-Related Technology (07)
93. Heating
94. Heavy Equipment (Construction)
95. Home Economics-Related Technology (09)
96. Home Equipment Demonstrator
97. Hospital Children's Division Assistant (07)
98. Industrial Atomic Energy
99. Industrial Electricians
100. Industrial Electronics
101. Industrial Engineering
102. Industrial Technology
103. Industrial Uses of Radioisotopes
104. Installation, Operation, and Maintenance of Reactors
105. Instrument Maintenance and Repair
106. Instrumentation Technology
107. Instruments (Other than Watches and Clocks)
108. Interior Decorating (04)
109. Interior Decorators Assistant (04)
110. Laundering
111. Law Enforcement Training
112. Leatherworking
113. Lineman
114. Lithography, Photography, and Platemaking
115. Machine and Tool Design
116. Machine Shop
117. Machine Tool Operation
118. Maintenance, Heavy Equipment
119. Manufacturing Industrial Managers and Officials
120. Marine Engineering
121. Maritime Occupations
122. Masonry
123. Mathematics (Occupations in) (04)
124. Mathematics and Physical Sciences Occupations

06 DISTRIBUTION, EDUCATION, ENTERTAINMENT, MANAGERIAL, AND BUSINESS ADMINISTRATIVE OCCUPATIONS

1. Advertising Management Occupations
2. Advertising Services
3. Apparel and Accessories
4. Area Studies Occupations
5. Athletics and Sports Occupations
6. Automotive
7. Childcare
8. Childhood and University Education Occupations
9. Cosmetology Occupations
10. Distributive Education, Other
11. Domestic Occupations
12. Educational Assistants and Trainers (Special)
13. Education of the Handicapped Occupations
14. Finance Occupations, Other
15. Food Management and Recreation Occupations
16. Food Service (14)
17. Home, Business, and Real Estate Management (04)
18. Hotel (04)
19. Institutional (04)
20. Journalism and Communications
21. Landscape, Building Material, Farm and Garden Supply, and Equipment
22. Leisure Occupations
23. Marketing and Sales Administration (04)
24. Medical Technology
25. Military Occupations
26. Personnel Assistance
27. Petroleum
28. Primary School and Kindergarten Education
29. Radio Operators
30. Railroad Conductors
31. Real Estate
32. Recreation and Tourism
33. Religious and Theology Occupations
34. Retail Trade, Other
35. Sales Distribution Management Occupations
36. Secondary School Education Occupations
37. Service Industry Managers and Officials
38. Ship Captains, Mates, Pilots, and Engineers
39. Social Science Occupations
40. Sociology Occupations
41. Vocational Education Occupations
42. Wholesale Trade, Other

07 HEALTH, MEDICINE, AND RELATED OCCUPATIONS

1. Central Supply Technician
2. Community Health Aid
3. Cytology (Cytotechnology)
4. Dental
5. Dental Assisting
6. Dental Hygiene (Associate Degree)
7. Dental Laboratory Technology
8. Dentists
9. Dietitians
10. Electrocardiograph Technicians
11. Electroencephalograph Technicians
12. Environmental Health (01)
13. Environmental Health Assistant (01)
14. Food Service Supervisor (09)
15. Health Occupations Education, Other (09)
16. Hemotology
17. Histology
18. Home Health Aid
19. Inhalation Therapy
20. Medical Assistant (Assistant in Physician's Office)
21. Medical and Dental Technology Occupations
22. Medical Emergency Technician
23. Medical Laboratory Assisting
24. Medical Laboratory Technology
25. Medicine and Health Occupations
26. Mental Health Technician
27. Mental Health Technology
28. Mental Retardation Aid
29. Miscellaneous Health Occupations Education
30. Mortuary Science
31. Nuclear Medical Technology (1661)
32. Nursing
33. Nursing Assistance (Aid)
34. Nursing (Associate Degree)

6. Agents and Appraisers
7. Archivists
8. Bookkeepers
9. Budget and Management Analysis Occupations
10. Budget Management Analysts
11. Business Data Processing Systems Occupations
12. Cashiers
13. Clerical and Office Supervisors
14. Clerk-Typists
15. Communications Systems Clerks and Operators
16. Computer and Console Operators
17. Correspondence Clerks
18. Data-Methods and Systems-Procedures Analysts
19. Duplicating Machine Operators
20. Economics Occupations
21. Executive Secretary
22. File Clerks
23. Filing, Office Machines, and General Office Clerical Occupations
24. Freelance Writers
25. General Office Clerks
26. Information Communication Occupations
27. Inspectors and Investigators, Managerial, and Public Service
28. Interpreters and Translators
29. Interviewers and Test Technicians
30. Judges
31. Key Punch and Coding Equipment Operators
32. Lawyers
33. Librarians
34. Machine Operators: Billing, Bookkeeping, and Computing
35. Mail and Postal Clerk
36. Mail-Preparing and Mail-Handling Machine Operators
37. Materials Support Occupations (Transporting, Storing, and Recording)
38. Messengers and Office Boys and Girls
39. Miscellaneous Managers and Officials (04)
40. Museum Curators and Related Occupations
41. Museum, Library, and Archival Sciences Occupations
42. Occupations in Law and Jurisprudence
43. Office Managers and Chief Clerks (04)
44. Office Occupations, Other
45. Peripheral Equipment Operators
46. Personnel Assistance
47. Personnel and Training Administration Occupations (04)
48. Personnel, Training, and Related Occupations
49. Planning and Production Clerks
50. Political Science Occupations (04)
51. Programmers
52. Public Administration Managers and Officials
53. Public Relations Management Occupations
54. Purchasing Management Occupations
55. Quality Control Clerks
56. Receptionists and Information Clerks
57. Secretaries
58. Social and Welfare Work Occupations (04)
59. Stenographers
60. Stenographic, Secretarial, and Related Occupations

16 & 17 SKILLED, TECHNICAL, AND ENGINEERING OCCUPATIONS

1. Aeronautical Engineering
2. Aeronautical Technology
3. Agricultural Electrification Technology (01)
4. Agricultural Engineering (01)
5. Agricultural Machinery and Equipment Technology (01)
6. Agricultural-Related Technology (01)
7. Agricultural Structures and Conveniences (01)
8. Agricultural Technology (01)
9. Agricultural Technology, Other (01)
10. Air Conditioning
11. Aircraft Maintenance
12. Aircraft Operations
13. Airframe
14. Airplane Pilots and Navigators
15. Animal Science
16. Appliance Repair
17. Architectural Occupations
18. Architectural Technology (Building Construction)
19. Architecture and Engineering (Occupations 18)
20. Art Occupations
21. Astronomy Occupations
22. Automotive Services
23. Automotive Technology
24. Aviation Occupations
25. Baker
26. Barbering
27. Biological Science Occupations
28. Blueprint Reading
29. Body and Fender
30. Bookbinding
31. Brazing and Soldering Occupations
32. Business Machine Maintenance
33. Carpentry
34. Ceramic Engineering
35. Chemical Engineering
36. Chemical Technology
37. Chemistry Occupations
38. Child Care Center Assistant (09)

111. Law Enforcement Training
112. Leatherworking
113. Linemen
114. Lithography, Photography, and Platemaking
115. Machine and Tool Trades
116. Machine Shop
117. Machine Tool Operation
118. Maintenance, Heavy Equipment
119. Manufacturing Industrial Managers and Officials
120. Marine Engineering
121. Marketing Occupations
122. Masonry
123. Mathematics (Except Teaching)
124. Materials Science and Chemical Sciences Occupations
125. Meat Cutter
126. Mechanical Engineering
127. Mechanical Technology
128. Mechanics
129. Medical Laboratory Assistant (07)
130. Metal Patternmaking
131. Metal Trades, Combined
132. Metallurgical Technology
133. Metallurgy
134. Metallurgy and Metallurgical Engineering
135. Metalworking
136. Meteorology Occupations
137. Millwork and Cabinet Making
138. Mining and Petroleum Engineering
139. Mining Industry Managers and Officials
140. Miscellaneous Professional, Technical, and Managerial Occupations (04 - 16)
141. Miscellaneous Technical Education (04)
142. Motor Repairman
143. Nuclear Engineering
144. Nuclear Technology
145. Nursing (Associate Degree) (07)
146. Oceanographic Technology (Physical, Biological, and Fisheries)
147. Office-Related Technology (14)
148. Operation, Heavy Equipment
149. Painters and Related Occupations
150. Painting and Decorating
151. Personal Service (09)
152. Petroleum Technology
153. Photoengraving
154. Photographic Laboratory and Darkroom Operation
155. Photographic Occupations
156. Physical Occupations
157. Pre-Engineering
158. Plastering
159. Plastics Occupations
160. Plumbing and Pipefitting
161. Police (Law Enforcement and Correctional Science Technology)
162. Power Plant
163. Printing Press Occupations
164. Product Design
165. Production
166. Public Service Occupations (04 - 14)
167. Radio/Television
168. Radiography
169. Radiologic Technology (X-Ray)
170. Refrigeration
171. Roadway Technology
172. Roofing
173. Sanitation Technology
174. Scientific Data Processing (14)
175. Seamanship
176. Sheet Metal
177. Ship and Boat Operation and Maintenance
178. Shoe Manufacturing
179. Shoe Repair
180. Silk Screen and Printing
181. Small Engine Repair, Internal Combustion
182. Sound Recording, Transcribing, Reproduction Occupations
183. Specialization, Other
184. Stationary Energy Source Occupations
185. Stock and Inventory Clerks (14)
186. Structural Technology
187. Surveyors
188. Supervisory and Administrative Management Occupations (04)
189. Systems Analysis (14)
190. Systems Analyst Technology
191. Tailoring (09)
192. Teacher's Assistant at the Preprimary Level (04)
193. Tellers (14)
194. Textile Production and Fabrication (09)
195. Tool and Die Making
196. Trade and Industrial Occupations, Other
197. Traffic, Rate and Transportation Clerks
198. Transportation
199. Transportation, Communication, and Utilities Industry Managers and Officials
200. Typing and Related Occupations (14)
201. Typists (14)
202. Upholstering
203. Ventilating (Filtering and Humidification)
204. Waiter/Waitress
205. Watchmaking and Repair
206. Welding (Combination)
207. Welding and Cutting
208. Wholesale and Retail Trade Managers and Officials (04 - 14)
209. Window Display (04)
210. Woodworking
211. Writers and Editors, Motion Picture, Radio, and Television (04)
212. Writers and Editors, Publishers (04)

NINTH GRADE SOCIAL STUDIES

OVERVIEW

Ninth grade social studies develops an understanding of:

- Economics as a realm of study
  - Scarcity
  - Resources
  - Wants and needs
- Comparative world economic system
  - Value
  - Incentive
  - Environment
  - Resources
  - Production and distribution
- Free enterprise
  - Distribution
  - Price
  - Supply and demand
- Income flow
  - Money
  - Business, government and the consumer
- Big business
  - Wages
  - Unions
  - Management
  - Compromise

These are to include, in general:

- Communication
- Humanization
- Social values and attitudes
- Environment
- Heritage
- Culture

Specific teaching concepts to be emphasized in the unit presented are:

- Scarcity
  - Distribution
    - Supply and demand as a reflection of consumer preference, technological change, resource availability and economic conditions
  - Labor
    - Skills
    - Wages
    - Working conditions

Career Objectives

Helping the student explore interrelationship and interdependence between jobs

Helping the student evaluate the relevance of his own aptitudes and abilities for broad occupational areas

Helping the student relate his valu concepts to a variety of job choices

Helping tne student examine occupations in terms of his current life style, considering such factors as personal and parental aspiration, family background, and personal values

Helping the student identify the personal compromises he may have to make in order to attain a chosen occupational job

Specific Concepts

Role
Association
Interdependence
Services
Socialization
Self
Scarcity
Resource
Distribution
Money and credit
Culture
Environment
Incentives
Competition
Institutions
Models
Status
Labor

Materials Needed

Visual materials including slides, filmstrips, films, magazines, and newspapers portraying a variety of occupations

Contract Bargaining simulation game

Speakers provided by community resource program

Possible Activities

I. Supply and demand in the job market. The purpose of this activity is to illustrate that the chances of a person getting a desired job depend not only on his qualifications, but upon how many jobs are available and how many applicants there are.

Jobs and opportunities for employment are closely related to geography and resources, economic conditions, technological development, and consumer wants. Shipping, ship-building, mining, and farming are typical of many

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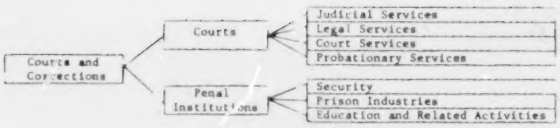

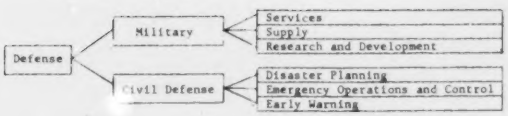

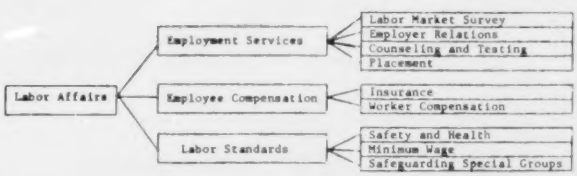

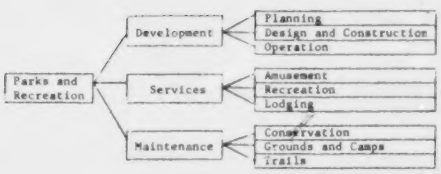

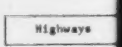

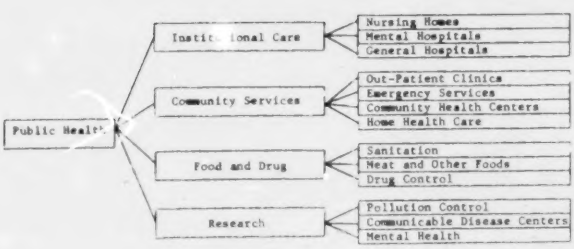

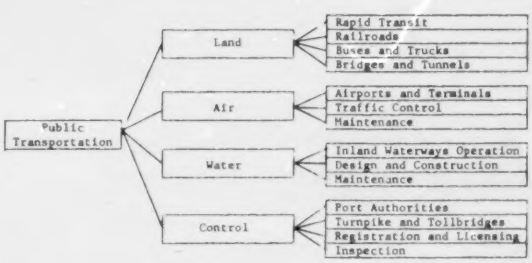

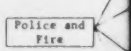

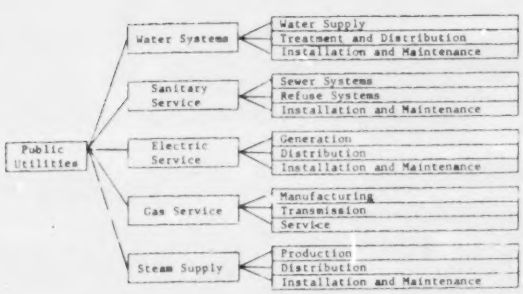

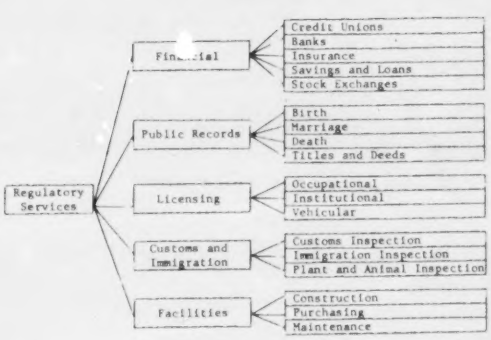

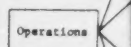

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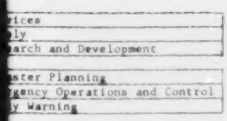

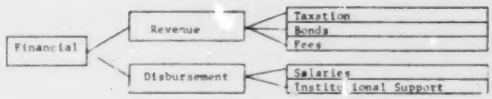

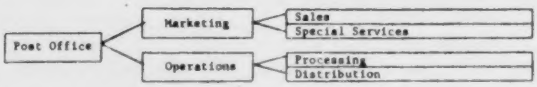

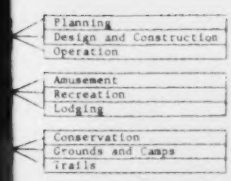

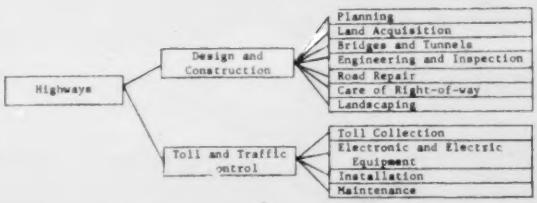

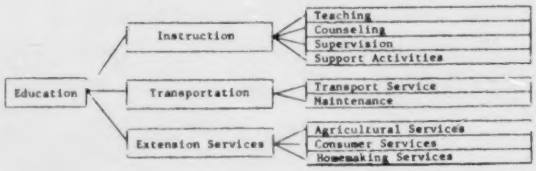

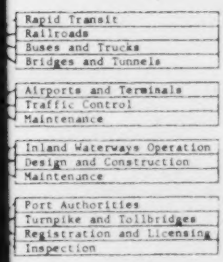

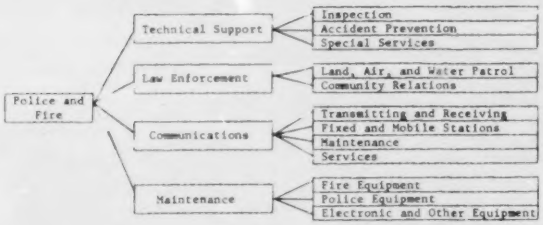

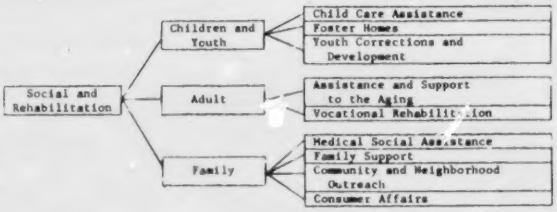

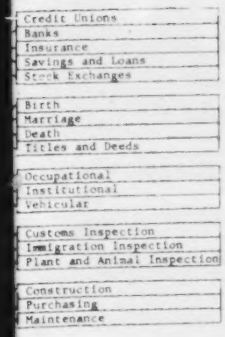

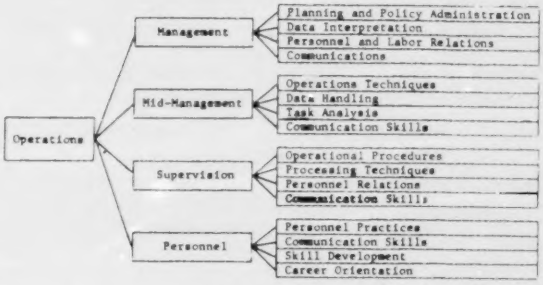

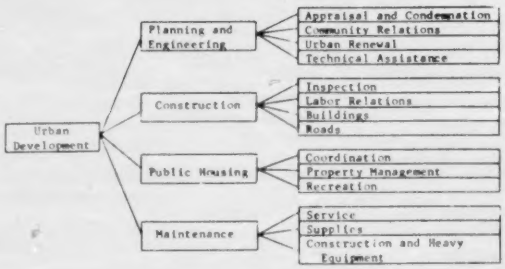

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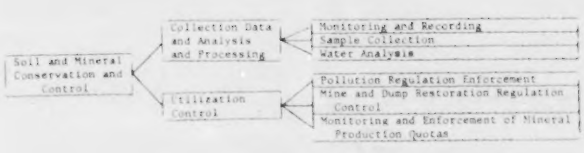
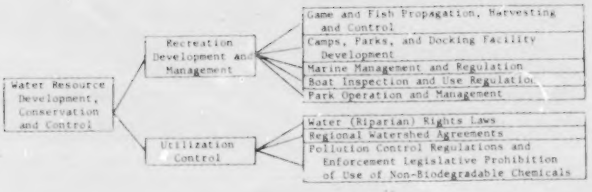
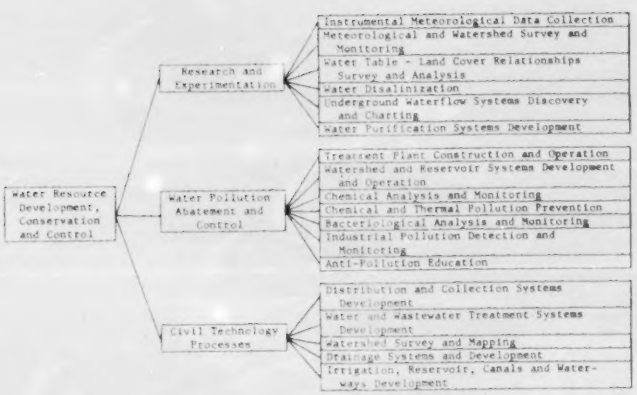
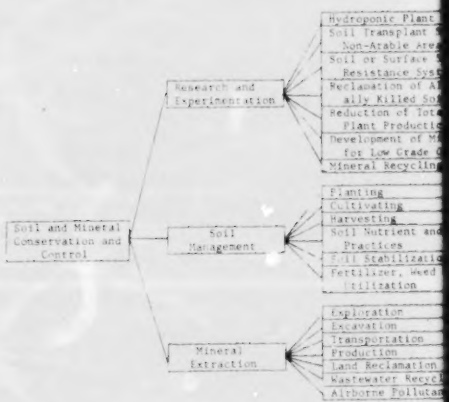
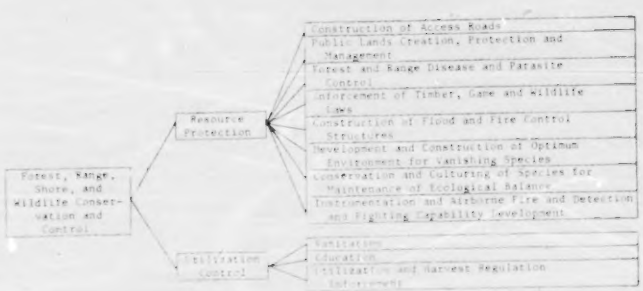
ENVIRONM

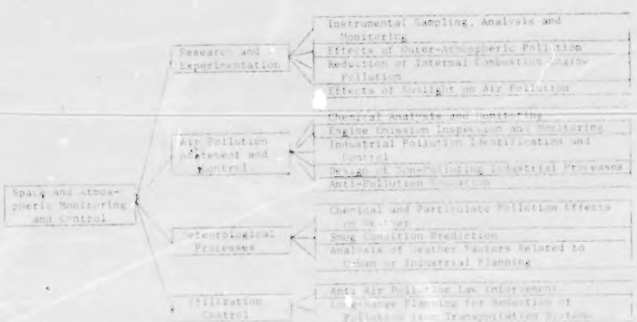

Soil and Mineral Conservation and Control
Collection Data and Analysis and Processing
Monitoring and Recording
Sample Collection
Water Analysis
Utilization Control
Pollution Regulation Enforcement
Mine and Dump Restoration Regulation Control
Monitoring and Enforcement of Mineral Production Quotas


Water Resource Development, Conservation and Control
Recreation Development and Management
Game and Fish Propagation, Harvesting and Control
Camps, Parks, and Docking Facility Development
Marine Management and Regulation
Boat Inspection and Use Regulation
Park Operation and Management
Utilization Control
Water (Riparian) Rights Laws
Regional Watershed Agreements
Pollution Control Regulations and Enforcement Legislative Prohibition of Use of Non-Biodegradable Chemicals


Water Resource Development, Conservation and Control
Research and Experimentation
Instrumental Meteorological Data Collection
Meteorological and Watershed Survey and Monitoring
Water Table - Land Cover Relationships Survey and Analysis
Water Disalinization
Underground Waterflow Systems Discovery and Charting
Water Purification Systems Development
Water Pollution Abatement and Control
Treatment Plant Construction and Operation
Watershed and Reservoir Systems Development and Operation
Chemical Analysis and Monitoring
Chemical and Thermal Pollution Prevention
Bacteriological Analysis and Monitoring
Industrial Pollution Detection and Monitoring
Anti-Pollution Education
Civil Technology Processes
Distribution and Collection Systems Development
Water and Wastewater Treatment Systems Development
Watershed Survey and Mapping
Drainage Systems and Development
Irrigation, Reservoir, Canals and Waterways Development

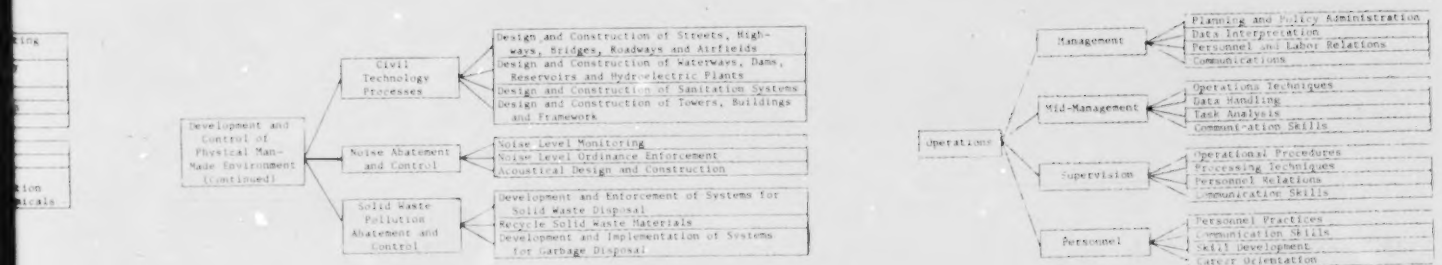


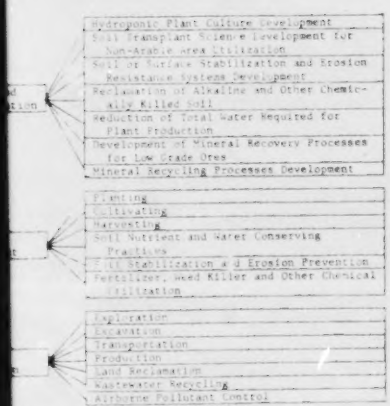

Forest, Range, Shore, and Wildlife Conservation and Control
Resource Protection
Construction of Access Roads
Public Lands Creation, Protection and Management
Forest and Range Disease and Parasite Control
Enforcement of Timber, Game and Wildlife Laws
Construction of Flood and Fire Control Structures
Development and Construction of Optimum Environment for Vanishing Species
Conservation and Culturing of Species for Maintenance of Ecological Balance
Instrumentation and Airborne Fire and Detection and Fighting Capability Development
Utilization Control
Sanitation
Education
Utilization and Harvest Regulation Enforcement

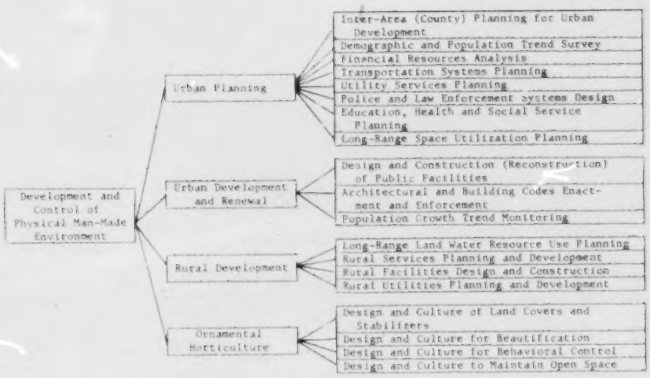

Space and Atmospheric Monitoring and Control
Research and Experimentation
Instrumental Sampling, Analysis and Monitoring
Effects of Outer-Atmospheric Pollution
Reduction of Internal Combustion Engine Pollution
Effects of Smelting on Air Pollution
Air Pollution Abatement and Control
Chemical Analysis and Monitoring
Engine Emission Inspection and Monitoring
Industrial Pollution Identification and Control
Design of Non-Polluting Industrial Processes
Anti-Pollution Education
Meteorological Processes
Chemical and Particulate Pollution Effects on Weather
Smog Condition Prediction
Analysis of Weather Factors Related to Urban or Industrial Planning
Utilization Control
Anti-Air Pollution Law Enforcement
Long-Range Planning for Reduction of Pollution from Transportation Systems

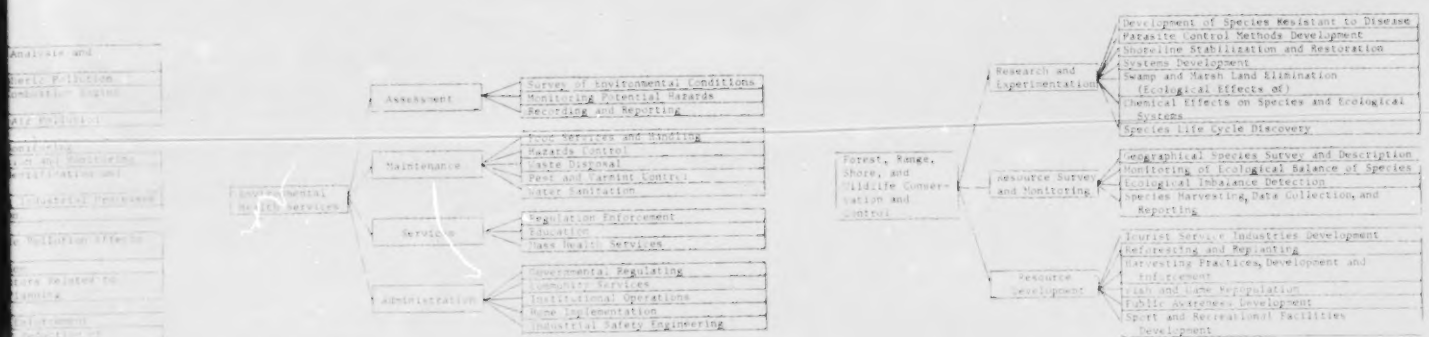
Cluster for

ENVIRONMENT




Hydroponic Plant Culture Development
Soil Transplant Science Development for Non-Arable Area Utilization
Soil or Surface Stabilization and Erosion Resistance Systems Development
Reclamation of Alkaline and Other Chemically Killed Soil
Reduction of Total Water Required for Plant Production
Development of Mineral Recovery Processes for Low Grade Ores
Mineral Recycling Processes Development
Planting
Cultivating
Harvesting
Soil Nutrient and Water Conserving Practices
Soil Stabilization and Erosion Prevention
Fertilizer, Weed Killer and Other Chemical Utilization
Exploration
Excavation
Transportation
Production
Land Reclamation
Wastewater Recycling
Airborne Pollutant Control


Development and Control of Physical Man-Made Environment
Urban Planning
Inter-Area (County) Planning for Urban Development
Demographic and Population Trend Survey
Financial Resources Analysis
Transportation Systems Planning
Utility Services Planning
Police and Law Enforcement systems Design
Education, Health and Social Service Planning
Long-Range Space Utilization Planning
Urban Development and Renewal
Design and Construction (Reconstruction) of Public Facilities
Architectural and Building Codes Enactment and Enforcement
Population Growth Trend Monitoring
Rural Development
Long-Range Land Water Resource Use Planning
Rural Services Planning and Development
Rural Facilities Design and Construction
Rural Utilities Planning and Development
Ornamental Horticulture
Design and Culture of Land Covers and Stabilizers
Design and Culture for Beautification
Design and Culture for Behavioral Control
Design and Culture to Maintain Open Space



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industries which must be located in certain areas because of geographical or resource availability imperatives. A relatively depressed economic situation can influence general job availability, while specific cutbacks in government or big business spending can drastically influence certain job clusters (for example, the aircraft and construction industries). Changes in technology are increasingly influencing the patterns of job availability, making some positions obsolete and creating others. One field in which this is immediately apparent is in the area of agriculture. Thirty out of every hundred people were involved in farming in 1900, while today only four in a hundred make their living this way. Consumer wants vary greatly, but geographical areas which have experienced radical increases in population concentration will certainly provide many and varied job opportunities.

A. Supply in the job market. For this activity the teacher will divide the class into groups of four or five members. At the outset, the task of each group will be to arrive at a limited number of job categories to cover all occupational areas, to write job descriptions, and to project, tentatively, the financial rewards for each category. Then as a group, the students will pick 10 adults in the community who are well known to them. Next the students will determine how many of the chosen adults could do the job in each category, and what their current wage level might be. The group should check on the accuracy of their work by using the vocational information materials in the IMC and the guidance office. Finaly each group will report their findings to the entire class by answering these questions:

> List your job categories
>
> How many of your 10 adults could do the job in each of the categories?
>
> Is there a relationship between the number of people who can do a job and wages? If so, what is the relationship?
>
> Would this information be of any value to you in planning your exploration, training, and acceptance of a job?

B. Demand in the job market. Initially students will browse through community newspaper want ads noting formats and kinds of information provided. Once again the class may be divided into groups of four or five. (There may be an advantage in retaining groups from activity A.) Using the job categories developed in activity A, students will ascertain which categories are represented in the want ads and the strength of demand for these positions as indicated by the number of ads present in an assortment of newspapers from around the country. Newspapers from varying locales will reflect differences in physical setting, resource availability, economic conditions, population growth, density, seasons of the year, and points in time passed.

Each group will then create an occupational prospectus for the year 1900, for the present time, and for the year 2000. Job categories should be similar to those previously developed. Included in the

activity should be a variety of locations in the United States that are to be assigned by the teacher.

The prospectus should describe how employment in 1900 was affected by climate, resources of the area, technology, population, and geographic location. The students should designate which jobs predominate in each designated area.

Similar prospectuses should be developed for the present time and the year 2000.

C. Supply and demand in occupational decision making. The teacher, from occupational schematics developed in activity B, will make a comprehensive list of jobs available at the present time. The students, using these lists, will then determine from interviews, community newspapers, and intuition whether demand in our geographical area for each occupation listed is low, average, or high. This process will be repeated for supply in these occupations. After obtaining the information, students will hypothesize at what level the wage for each occupational group will fall. This activity may be used with a check list form like the one enclosed.

II. A. Assessing observable factors contributing to job satisfaction. This activity would be initiated through a general class discussion in which the students would first develop a definition of the term job satisfaction and then, with the help of the teacher, write a list of those factors which the students feel are pivotal to job satisfaction.

Next, a presentation of visual materials (such as slides and films) portraying various aspects of a multitude of occupations would be made. It would be the students' task to assess the working conditions for these jobs according to the list previously detailed. Before further discussion of this assignment in class, the student will utilize other sources of information (such as newspapers, magazines, T.V.) to gather other data in order to expand the scope of his knowledge of working conditions.

Utilizing information gained from these sources, and after a re-run of selected segments of the previous visual presentation, students will decide what job satisfaction factors can be determined by observation. (The purpose of this activity is to make evident to students the information about a job that may be obtained by a discerning observer.)

B. Expanding awareness of job satisfaction factors. In this activity, elements of job satisfaction are expanded beyond those immediately visible to the inexperienced inquirer. Added to this activity will be a presentation of common methods to modify those factors which contribute to job satisfaction. The concept of mutual responsibility of management and labor will be discovered.

Contract Bargaining Simulation: This activity will work well after the students are acquainted with the perfect market condition and/or factors of production. It gives them the opportunity to use their knowledge of the market flow as well as to develop this knowledge as the simulation takes place. If desired, many concepts such as fringe benefits and industrial structure may also be developed from this simulation.

Divide the class into groups of no more than six. Designate half of these people as employees and the other half as management personnel. Pass out the simulation papers (included in this packet). Read the first two pages with the entire class. This is general background information. The last page represents information given only to labor or management. These papers should not be discussed by everyone. They discuss the elements of job satisfaction for each side. If it is possible to meet with only half of the class at a time, meet with labor and management individually, reviewing their specialized information. After students understand the situation generally, have them start bargaining for a contract. The first session will be slightly confusing and no agreement will be reached. At this time have both sides meet within their respective groups (employee/employer). Have each group discuss what has taken place in their respective negotiation sessions and develop strategy for the forthcoming sessions.

Continue this process until a contract agreement is reached. Through this compromising process, the student should develop a better understanding of job satisfaction such as wages, seniority, holidays, fringe benefits, hours of work, and physical setting.

Questions:

What is the most important factor in job satisfaction? (No single answer)

Could factors influencing job satisfaction (seniority, paid holidays, air conditioning) be considered wages?

Do you think the factors influencing job satisfaction are the same today as they were fifty (forty, twenty) years ago? Explain.

C. ".....From the horse's mouth." Invite employees or employers into the class. With emphasis on extensive student-speaker interchange, ask these people to discuss their occupations--the responsibilities as well as the material and psychological rewards. Previously instruct the students that it is their task to assess the importance of the various job satisfaction aspects of the occupations presented.

COLLECTIVE BARGAINING SIMULATION

Part 1. General Information

During almost every year workers and employers must try to agree on the way they will work together in the coming year. When both the workers and the employers do agree, they sign a contract that requires them to keep the promises they have made to each other. If they don't sign a contract, then the workers often refuse to work and may go on strike.

This game should show you, as a player, what happens between the employer and the workers, when they try to agree on working conditions for the next year. To help you get a clearer picture of what is happening, you will be given a job as an employer or as a member of the workers' union. Your success in getting a good contract for your group depends on how much you know about items being bargained for and the arguments of both the employers and the union.

You will have a day to study the information you have been given. Then you will have one meeting together with others that have the same job you do, to discuss common problems. After the meeting, you will meet with someone from the other group and try to reach an agreement about next year's contract. You will be given satisfaction points for each of the items from the demands page that you get the other group to agree to on the contract. You will be ranked with the rest of the class on the number of points you can get.

The information on this page is available to both groups, but your group is the only one to have the information on the demands page. Be sure that no one from the other group sees your demands page.

General information about the employer

The employer, Moo Juice, Inc., is the largest seller of milk in the Minneapolis area. Moo Juice has four competitors. These competitors are changing their methods and hope to take some of the milk business going to Moo Juice. The government controls the milk price so Moo Juice cannot change its prices.

General Information about the union

The union, Milk Maids Local 1, as part of the AFL-CIO represents the 150 workers at Moo Juice. It would take three to four weeks to train replacements for the workers. There are not enough non-union workers to operate the Moo Juice plant if there is a strike.

The history of labor relations between Moo Juice and Milk Maids Local 1

Moo Juice has reported a steady but moderate increase in profits and productivity over the past eight years. In the past the company has generally been successful in getting a contract more favorable to themselves than to the employees. It is a well known fact that if a strike took place for a long period of time, the government would step in and try to settle the problem. This happened once before and the Milk Maids Local then made large gains for the workers.

It must be noted that Moo Juice, in the past, has not granted any of the union's demands unless their competitors were forced to give these working conditions to their employees first.

The union would find a strike difficult but not impossible for many of its members do not want a strike.

Other policies

Government policy has set a wage-price guidepost of 3.4 percent for the dairy selling industry. This guidepost is based upon the 1969 productivity and wage levels.

List of Demands

Bargaining Demands of Management and Union

	Current Agreement	Union Demands	Management Demands
Wages:	$3 /hr.	10 percent increase	No increase
	Time and one-half for overtime	Double time for overtime	Stay and time and one-half for overtime
Hours:	40-hour standard	36-hour standard, overtime payable after 36 hours	Keep 40-hour standard
Cleanup time:	Cleanup on own time	15 minutes paid cleanup time	No paid cleanup time
Seniority:	Department seniority	Plant-wide seniority	Department seniority to be kept
Paid Holidays:	Seven (7)	Wants eighth paid holiday	Wants only seven paid holidays

Industry patterns:

a. The union has been averaging about seven percent in wage gains with Moo Juice's competitors on wage increase in recent contracts.

b. In the last contracts with two of Moo Juice's competitors, the Milk Maids have won double time for overtime.

c. In the last contracts with Moo Juice's largest competitor, the union got a 37½-hour week.

d. In all contracts with Moo Juice's competitors, the union has won 15 minutes of paid cleanup time.

e. The union has not yet won plant-seniority in any other plant.

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Part II. Union demands and information available only to the union

1. Importance and value of union demands

Demand	Rank (1 = most important)	Satisfaction Points
Wages	1	10
Cleanup time	2	6
Plant-wide seniority	3	5
36-hour week (standard)	4	3
Eighth paid holiday	5	1
	Total points	25

Reasons for Demands

Wages are ranked first because of the increases in the ability of the employees to make things and because the company profits have increased without labor making gains. The younger members of the union (about 40 percent) really want a wage increase.

Cleanup time is second in importance because the membership feels a large part of the increase in their ability to make things has come from unpaid cleanup time. Remember that other firms have paid cleanup time. Milk Maids' officials (you) think that unpaid cleanup time for all the workers adds up to 1875 hours per week, or $5625 per week in "lost" wages. Older workers with high numbers of years experience (30 percent of the membership) are particularly bothered by this.

Plant-wide seniority (number of years of experience on the job) is third because some departments have a large number of experienced workers. In times of slow business, these more experienced men cannot move into other departments and therefore must be laid off. Older members of the union are the reason for this demand, to the strong dislike of the younger members. The older members appear to be the more powerful group in the union, but could not convince the younger members to go along without a hard fight in the union.

The 36-hour week is wanted by all members of the union because "shorter hours mean more pay in overtime." This 36-hour week can take any form, but they would like the four-hour cutback in work time to be on Friday afternoon. If a 36-hour week cannot be won, then you should try a less-than-40-hour week. This demand is viewed as a good item to trade for something else.

Finally, the low satisfaction of the eighth paid holiday suggests its purpose in the list of demands is to trade for something else.

2. Other information

The union estimates that its strike fund will allow the Milk Maids to make a 30-day strike. It is possible the union could get money from the National Teamsters Union that they are members of, but this depends on the outcome of a national trucking contract being worked on at this time by the Teamsters. Help is unlikely if the National Teamsters go on strike.

Note: It may be helpful to look at the importance of the demand to the Milk Maids in deciding your willingness to strike. Also consider weapons available other than strikes, and how long it would take to make up lost wages from a strike.

Part II. Management demands and information available only to management

1. Importance and value of management demands

Demand	Rank (1 = most important)	Satisfaction Points
Wages	1	10
Department seniority	2	8
40-hour standard week	3	6
Unpaid cleanup time	4	3
Only 7 paid holidays	5	1
	Total points	28

Reasons for Demands

As a part of Moo Juice management, you feel wages must not increase for several reasons. First, Moo Juice is losing some of its customers to other milk sellers. If management is to keep from losing customers, it feels it must keep the profit and the ability to make things the same as they are now. An increase in wages could result in the layoff of eight to ten men, some of them workers with much experience. Secondly, a large wage increase asked by the union would raise Moo Juice's wage costs, both regular and overtime, by a large amount. Finally, management feels the guidepost for the dairy selling industry is too high and out of date. The guideline seems to favor the other milk sellers and not Moo Juice. Moo Juice would also like to keep department seniority because of the high costs of plant-wide seniority, especially when the forcing of a worker with more experience off the job actually takes place. Secondly, some key jobs in a few departments require special training. This training is expensive and takes a long time.

Keeping the 40-hour standard work week is also important. Cost of overtime and the loss in the amount made because of the worker being more tired are two reasons already mentioned. Moo Juice management also feels the number of workers will have to be increased by 10 percent to keep the present level of making milk. If Milk Maids get any paid cleanup time, keeping the standard work week will be important to keep cost down.

Management is willing to give some paid cleanup time because other companies are already doing it, but does not want to give 15 minutes. The cost of giving 15 minutes of paid cleanup time is about $5,625 per week.

The low cost ($3,600 per year) of the eighth paid holiday makes this a useful exchange item. Note its low satisfaction to management.

2. Other information

Moo Juice thinks it can bear a strike for about 40 days without long-run damage to its profits or ability to make things. However, management must not forget its contracts to sell milk to five suppliers and the experience under government settlement of the previous contract.

ST. PAUL PIONEER PRESS
April 5, 1894

HELP WANTED - MALE

WANTED AT ONCE - A GOOD SCANDINAVIAN drug clerk, must be registered in Minnesota. Address: F.L.N. Pioneer Press

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STRONG BOY TO LEARN STEREOTYPING. Apply to Northwestern Newspaper Union, 1107 Pioneer Press Bldg.

HELP WANTED TO MAKE THE MERITS of Maltese Whisky known to those in need of a tonic or suffering with grippe. Apply to your druggist.

WANTED - A COMPETENT TRAVELING SALESman, headquarters at Mpls. to canvass the trade of the two cities and vicinity. One acquainted with the stove trade preferred. Address: Bx. Care Nicollet Hotel, Mpls.

WANTED - AN EXPERIENCED CIGAR SALESman for old established house; country trade. K 36, Pioneer Press

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HELP WANTED - FEMALE

WANTED GIRL FOR GENERAL HOUSEWORK, must come well recommended. 727 Marshall Ave.

WANTED - A FIRST CLASS COOK References required. 192 Summit

WANTED - A HEALTHY WET NURSE - 357 Marie Ave. St. Paul

WANTED - YOUNG GIRL 14 to 15 years old to take care of a baby. Inquire 727 Ashland

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MINNEAPOLIS TRIBUNE
December 7, 1897

HELP WANTED - MALE

ABLE CHRISTIAN MEN OF GOOD ADDRESS to extend the new home culture work; permanent, high grade employment; only strong, reliable men need apply. 406 Delaware St. S. E.

A FEW GOOD HUSTLERS - 36 CENTRAL AVE.

WANTED FOR U.S. ARMY - Able-bodied, unmarried men, between ages of 21-30, citizens of the United States, of good character and temporate habits, who can speak, read and write English. For information apply, preferrably by letter, to Recruiting Officer, Fort Snelling, Minnesota

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WANTED - EXPERIENCED MALE STENOGRAPHER and type writer; must master Scandinavian and English; good moral character. Apply, with references, K 95, Tribune

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HELP WANTED - FEMALE

COMPETENT CHILD'S NURSE OR MAID. Irish or German preferred, two children in family, four and eight years. Reply to Mrs. Samuel Hill, 1910 Stevens Ave. Minneapolis

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LADY WHO UNDERSTANDS ELECTROLYSIS - can secure steady employment. Address at once giving references and experiences. X 54, Tribune

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AN EDUCATED young lady of good address; must be an experienced canvasser. Can procure good position.

GIRL FOR HOUSEWORK - WASHING SENT OUT; no furnace to tend; central location 105 Spruce Place, near Grant St.

MINNEAPOLIS SUNDAY TRIBUNE
August 1, 1920

HELP WANTED - MALE

STENOGRAPHERS - Three openings in Minnesota. Young men to learn milling business. Light dictation, $1,000 to $1,500

BKPR. - Minn. Familiar with Real Estate paper. $1,500

MGR. ASST. BUYER - Grain elevator $1,500

WANTED - YOUNG MAN OVER 20 TO ASSIST bookkeeper in large downtown store. Must be good penman and accurate at figures. $75 to $80 to start. Address in own handwriting. Address: R 1997, Tribune

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3 SALESMEN, LIVE WIRES, TO SELL electrical appliances. An opportunity to make some real money and learn the business. Large advertising campaign starts Aug. 1. Ask for Mr. Morton. Great Western Stove Co. 312 Henn. Ave.

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10 CARPENTERS
65 BUILDING LABORERS
1 A-1 STEAM FITTER
2 CAR WASHERS
40 COMMON LABORERS
10 WAREHOUSEMEN
2 JANITORS
2 NIGHT WATCHMEN
10 TRUCKERS
3 WOOD MACHINE OPERATORS
2 BENCH MECHANICS
6 TINNERS
4 CEMENT FINISHERS
3 TEAMSTERS
8 ELECTRICIANS

CITIZENS ALLIANCE FREE EMPLOYMENT BUREAU, 212 7th ST. S.
NO FEE CHARGED

HELP WANTED - MALE (cont.)

MAN TO DRIVE TEAM AT ONCE TO DELIVER wood and coal. Cedar Ave. Fuel Co. 630 Cedar Ave. ATlantic 1370

TEN HARVEST HANDS IN THE RED RIVER VALLEY. $5.00 per day and board. Want these men to go out tonight. Apply 111 Marquette N.W. Employment Co.

BLACKSMITH, EXPERT, who understands spring work. Best pay, steady job. Standard Spring Co. 409 S. 5th St.

BUSHELMAN: Wanted at once. Steady year round work. C. A. Ervig, 322 - 20th St.

HELP WANTED - FEMALE

SALESWOMEN WANTED FOR VARIOUS DEPARTMENTS. APPLY SUPERINTENDENT, BALCONY, L. S. DONALDSON COMPANY

Steno. - Auto Sales $100
Steno. - Publishing house $100
Steno. - Manufacturing $100
Biller - three - $75-$85
Cashier - Record work $18
Typist - Good demand
Filing - Young experienced girl $15-$17
THE BROWN BUREAU, 700 PALACE

CHAMBERMAIDS AND HALL MAID WANTED Apply housekeeper, 8th floor, YMCA

DISHWASHER WANTED - APPLY TWIN CITY LUNCH - 315 Marquette.

MINNEAPOLIS SUNDAY TRIBUNE
August 5, 1934

MINNEAPOLIS SUNDAY TRIBUNE
December 2, 1934

(Because of economic conditions, the want-ads for this date were extremely limited. Most ads were for salesmen.)

HELP WANTED - MALE

MARRIED MAN about 30 years of age, capable of selling dairy products to regular route of retail trade in city. To wear well with the customers since most of the business is repeat orders. Salary plus bonus in accordance with proven results. Write T 15 Tribune.

FLOUR SALESMEN for retail grocery trade. Twin Cities and rural area. Liberal commission; state experience and all details. Write M 1166 Tribune.

WANTED - Used Car Salesman with car, one who can sell. No orders takers need apply. Apply in person to: Mr. Higbee, Grossman Chev. Co.

MAKE $50 WEEKLY. Buy old inner-tubes for 2¢, sell for 90¢. Complete instructions - 25¢. Seibers, Box 2734, B & L Station, Minneapolis

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EXPERIENCED MAGAZINE SALESMAN, best proposition on market Sure sales. We train you. Mr. Blake 1040 Lumber Ex. Bldg.

EXPERIENCED CHEF WITH GOOD references wanted. Good wages. 315 14th St. S. E.

HELP WANTED - FEMALE

HOUSEKEEPER - Take full charge. 3 in family, in city. P.O. Box 4, Mpls.

WOMAN who understands Swedish, to care for woman invalid. State age. $15 per week. Write H 023 Tribune

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ENTERTAINERS WANTED. Auditions, Big demand and agents wanted. Arthur Malmberg, 3544 32nd Ave. S.

STRONG CATHOLIC GIRL, thoroughly experienced, good with children, good pay if capable. CH 1848

WANTED - Musician for country tavern. Piano or string instruments preferred Also lady entertainer. Write T 168 Tribune

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MINNEAPOLIS MORNING TRIBUNE
August 1948

HELP WANTED - MEN

ASSEMBLERS - Rotating shift
DONALDSON COMPANY, INC.
666 Pelham Blvd.
St. Paul Midway District

BODY MAN - PAINTER to take over complete body shop, percentage deal. Excellent opportunity for right man. Fenton Chev. Co. Litchfield, Minn.

GRAIN SHOVELERS - Experience preferred but not necessary, unloading wheat only. Apply Robin-Hool Elevator, Hiway 7 and Salen Ave. or Phone Wh 0488, after 4 P.M., call WH 4470.

$1.15 to $1.95 per hour
Day Shift
Boeing Airplane Co.
405 Loeb Arcade - 5th & Henn.

Lathe - Men - Experienced
Du - 2984

LINOTYPE operator, experienced preferred, but will take beginner. Single preferred because of housing situation. Drinkers need not apply. County seat, 100 miles east of Twin Cities. Barron County News Shield, Barron, Wisc.

PHOTOGRAPHER. Dark-room man; thorough experience and all around portrait work essential. Steady position, good salary assured.
AGGORD STUDIO 55 S. 85th

PRESSER - Exp. Comb. wool-presser. Steady work, good wages. NO floaters. Model Launderers
19th st. and Henn. S.

HELP WANTED - WOMEN

POWER MACHINE OPRS. We have many openings for operators including:
SPECIAL MACHINE OPRS.
to sew on sportswear
MUNSINGWEAR, INC. 275 Lyndale N.

ANCHOR CASUALTY CO. University Ave. at City Limits - several good positions
Stenographic
Dictaphone
Typing
Filing
Permanent work with good future.
5 day week, many employee benefits.
Call Miss Brown - NE 4054

DAYTON'S
SALESWOMEN FOR
TEMPORARY
EMPLOYMENT
APPLY EMPLOYMENT OFFICE 9th FLOOR

STOCK GIRL - full time. Interview Tuesday between 8 and 9 A.M. only. Amlunen, Co.

TELEPHONE OPERATOR, TYPIST
N.W. Warehouse Co.
301 N. 7th St.

SUPPLY AND DEMAND--A DETERMINER OF WAGES AND WORKING CONDITIONS

OCCUPATION	SUPPLY			DEMAND			WAGES		
	Low	Average	High	Low	Average	High	Low	Average	High
TEACHER OF SCIENCE									
BAKER									
MECHANIC									

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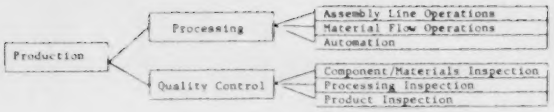

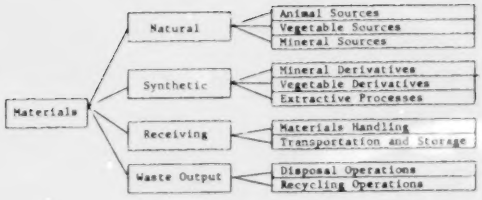

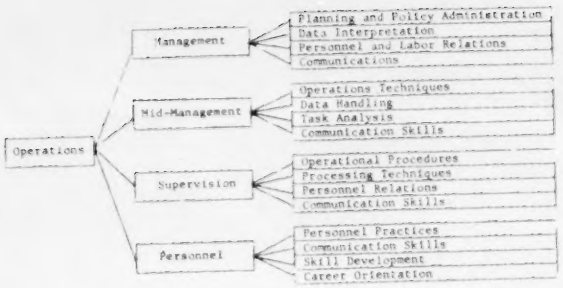

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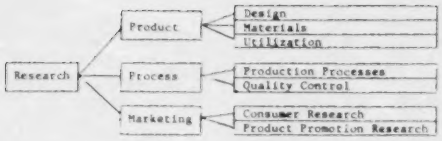

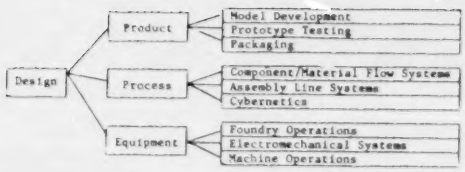

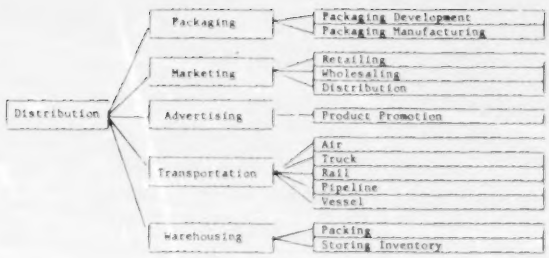

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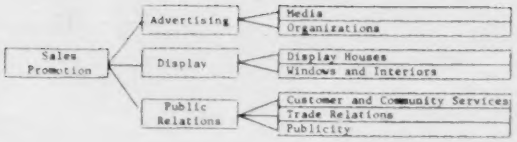

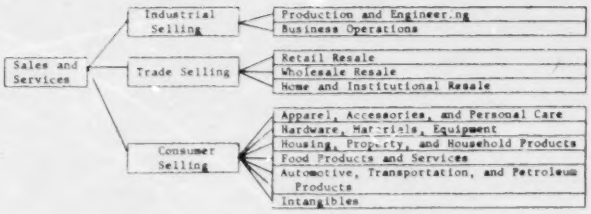

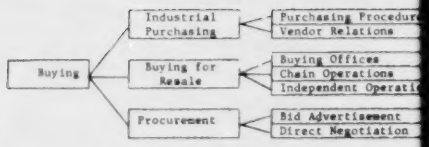

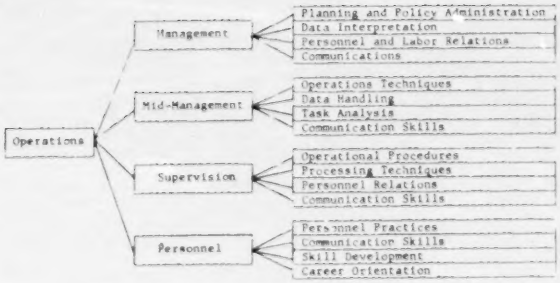

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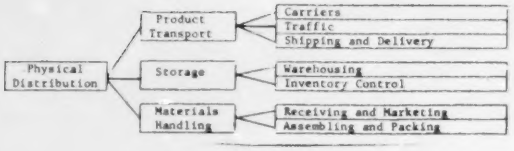

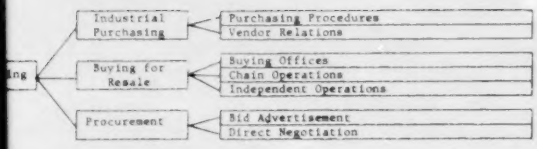

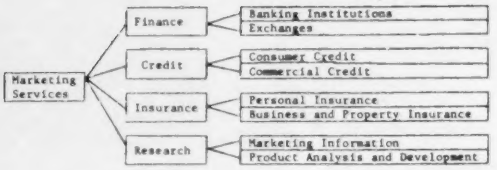

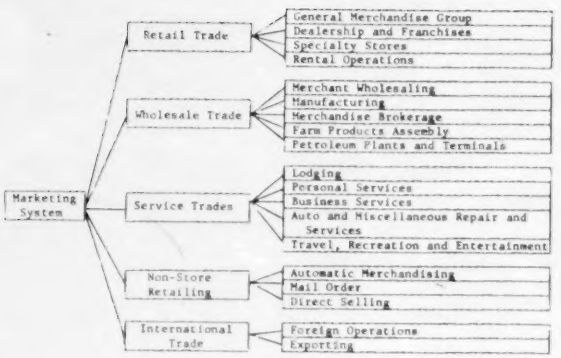

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BIBLIOGRAPHY

"Abstracts and/or Titles of Research and Development Projects Dealing with Orientation to Work and Career Development," Minnesota Reasearch Coordinating Unit for Vocational Education, 145 Peik Hall, University of Minnesota, Minneapolis, Minnesota 55455

"Educational Opportunities for Career Preparation" (500 career or career areas computerized or on print-outs) EDINET, Honeywell, Inc., Minneapolis, Minnesota

Employment Trends, Minnesota Department of Manpower, 309 Second Avenue S., Minneapolis, Minnesota 55401

Hansen, Lorraine Sundal, Career Guidance Practices in School and Community, National Vocational Guidance Association, 1607 New Hampshire Avenue N.W., Washington, D. C. 20009, 1970

Johnson, Donavan A. Games for Learning Mathematics, J. Weston Walsh Publishers, Portland, Maine, 1960

Magaun, F. Alexander, "Successfully Finding Yourself and Your Job," Harper and Row, New York, N. Y.

Maturity--Growing Up Strong, Scholastic Book Services, New York, 1968

Munson, Harold L., Guidance Activities for Teachers of English (Reorder No. 5-134), Social Studies (Reorder No. 5-135), Mathematics (Reorder No. 5-137), Science (Reorder No. 5-136), Science Research Associates, Inc., 259 East Erie St., Chicago, Illinois 60611

"Newspapers: Functions, Philosophy, and Operations," Minneapolis Tribune, 425 Portland Avenue, Minneapolis, Minnesota 55415

Occupational Employment 1975, Minnesota and Minneapolis-St. Paul Metropolitan Area, Minnesota Department of Employment Security, 309 Second Avenue S., Minneapolis, Minnesota 55401

Prejudice - The Invisible Wall, Scholastic Book Service, New York, N. Y. 1968

Sinich, Daniel, "Your Personality and Your Job," Science Research Associates, 259 East Erie Street, Chicago, Illinois 60611

Smith, Brandon B. and Moss, Jerome, Jr., Process and Techniques of Vocational Development, Minnesota Research Coordinating Unit for Vocational Education, University of Minnesota, Minneapolis, Minnesota 55455

"Speakers Directory," Mankato State College, Mankato, Minnesota 56001

Suggested Teaching--Learning Approaches for Career Development in the Curriculum, Distributive Educators and Counselors, University of Minnesota, 1968

Sullivan, Marjorie Doyle, Programmed Math, Webster Division, McGraw-Hill Book Company, New York, N. Y., 1968

BIBLIOGRAPHY

Super, D. E., "Self Concept in Vocational Development in Career Development: Self-concept Theory," College Entrance Examination Board, 1963

Talagam, Dean P., A Comprehensive Occupational Education Program, Wyoming State Department of Education, 1970

Vocational Biographies, Sauk Centre, Minnesota 56378, 1971

"The Vocational Guidance Quarterly," American Personnel and Guidance Association, 1607 New Hampshire Avenue, N. W., Washington, D. C. 20009

"Why Young People Fail To Get and Hold Jobs," New York State Department of Labor

Worthy, James C., "What Employers Want," Science Research Associates, 259 East Erie Street, Chicago, Illinois 60611